

10/609,298

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applications updated
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NEWS 20 APR 15 WPIDS, WFINDEX, and WPIX enhanced with new
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NEWS 21 APR 28 EMBASE Controlled Term thesaurus enhanced
NEWS 22 APR 28 IMRESEARCH reloaded with enhancements
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NEWS 24 MAY 30 DGENE, FOTGEN, and USGENE enhanced with new homology
sequence search option
NEWS 25 JUN 06 EPFULL enhanced with 260,000 English abstracts
NEWS 26 JUN 06 KOREAPAT updated with 41,000 documents

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AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008

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McIntosh

10/609,298

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COST IN U.S. DOLLARS	ENTRY	SESSION
FULL ESTIMATED COST	0.21	0.21

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DICTIONARY FILE UPDATES: 6 JUN 2008 HIGHEST RN 1026208-38-7

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=>
Uploading C:\Program Files\Stnexp\Queries\10609298a.str

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *
Structure attributes must be viewed using STN Express query preparation.

=> s l1
SAMPLE SEARCH INITIATED 18:08:35 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 2232 TO ITERATE

89.6% PROCESSED	2000 ITERATIONS	24 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)		
SEARCH TIME: 00.00.01		

FULL FILE PROJECTIONS:	ONLINE	**COMPLETE**
	BATCH	**COMPLETE**
PROJECTED ITERATIONS:	41806 TO	47474
PROJECTED ANSWERS:	225 TO	845

L2 24 SEA SSS SAM L1

=> s l1 full
FULL SEARCH INITIATED 18:08:41 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 44523 TO ITERATE

100.0% PROCESSED	44523 ITERATIONS	519 ANSWERS
SEARCH TIME: 00.00.01		

L3 519 SEA SSS FUL L1

=> file caplus	SINCE FILE	TOTAL
COST IN U.S. DOLLARS	ENTRY	SESSION
FULL ESTIMATED COST	178.36	178.57

FILE 'CAPLUS' ENTERED AT 18:08:46 ON 08 JUN 2008
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=> s 13

L4 120 L3

=> s 14 and flavivirus or pestivirus or flaviviridae or hcv or hepatitis c

1747 FLAVIVIRUS

864 FLAVIVIRUSES

2025 FLAVIVIRUS

(FLAVIVIRUS OR FLAVIVIRUSES)

501 PESTIVIRUS

266 PESTIVIRUSES

597 PESTIVIRUS

(PESTIVIRUS OR PESTIVIRUSES)

645 FLAVIVIRIDAE

14183 HCV

24 HCVS

14187 HCV

(HCV OR HCVS)

67218 HEPATITIS

1 HEPATITISES

67218 HEPATITIS

(HEPATITIS OR HEPATITISES)

3835463 C

20967 HEPATITIS C

(HEPATITIS(W)C)

L5 22498 L4 AND FLAVIVIRUS OR PESTIVIRUS OR FLAVIVIRIDAE OR HCV OR HEPATITIS C

=> s 14 and (flavivirus or pestivirus or flaviviridae or hcv or hepatitis c)

1747 FLAVIVIRUS

864 FLAVIVIRUSES

2025 FLAVIVIRUS

(FLAVIVIRUS OR FLAVIVIRUSES)

501 PESTIVIRUS

266 PESTIVIRUSES

597 PESTIVIRUS

(PESTIVIRUS OR PESTIVIRUSES)

645 FLAVIVIRIDAE

14183 HCV

24 HCVS

14187 HCV

(HCV OR HCVS)

67218 HEPATITIS

1 HEPATITISES

67218 HEPATITIS

(HEPATITIS OR HEPATITISES)

3835463 C

20967 HEPATITIS C

(HEPATITIS(W)C)

L6 58 L4 AND (FLAVIVIRUS OR PESTIVIRUS OR FLAVIVIRIDAE OR HCV OR HEPATITIS C)

IIIS C)

=> d bib abs hitstr 40-58 16

L6 ANSWER 40 OF 58 CAPLUS COPYRIGHT 2008 ACS ON STN
 AN 2006:103884 CAPLUS
 DN 144:171198
 TI Preparation of alkyl-substituted 2-deoxy-2-fluoro-D-ribofuranosyl
 pyrimidine and purine nucleoside analogs via condensation of the lactone
 to nucleosides as potential antiviral agents
 IN Wang, Pelyuan; Stec, Wojciech; Clark, Jeremy; Chun, Byoung-Kwon; Shi,
 Junxing; Du, Jinfa
 FA Pharrasset, Inc., USA
 SO PCT Int. Appl., 34 pp.
 CODEN: PIMX22
 DT Patent
 LA English
 FAN CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006012440	A2	20060202	WO 2005-US25916	20050721
	WO 2006012440	A3	20060727		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GN, GW, HT, IN, KE, KE, LS, MM, MN, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	AU 2005267051	A1	20060202	AU 2005-267051	20050721
	CA 2574651	A1	20060202	CA 2005-2574651	20050721
	EP 1773856	A2	20070418	EP 2005-775359	20050721
	R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR			
	CN 101023094	A	20070822	CN 2005-80031530	20050721
	BR 2005012104	A	20080311	BR 2005-12104	20050721
	JP 200807547	T	20080313	JP 2007-522763	20050721
	US 20060199783	A1	20060907	US 2006-353597	20060213
	MX 20070803	A	20070402	MX 2007-803	20070119
	IN 2007060605	A	20070706	IN 2007-060605	20070220
	KR 200714344	A	20071203	KR 2007-703960	20070220
FRAI	US 2004-589866P	P	20040721		
	US 2004-608320P	P	20040909		
	US 2005-185988	A1	20050721		
	WO 2005-US25916	W	20050721		
OS	MARPAT 144:171198				
GI					

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A process for preparing of 2-deoxy-2-fluoro-2-methyl-D-ribofuranolactones, I, wherein R1 and R2 can independently be H, CH3, acetyl, benzoyl, pivaloyl, 4-nitrobenzoyl, 3-nitrobenzoyl, 2-nitrobenzoyl, 4-chlorobenzoyl, 3-chlorobenzoyl, 2-chlorobenzoyl, 4-methylbenzoyl, 3-methylbenzoyl, 2-methylbenzoyl, 4-phenylbenzoyl, benzyl, 4-methoxybenzyl, trityl, trialkylsilyl, t-butyl-dialkylsilyl, t-butyl-diphenylsilyl, TIFDS, THP, MOM, or MEM are prepared and used in the condensation to 2-deoxy-2-fluoro-D-ribofuranosyl pyrimidine and purine nucleoside analogs. Thus, 2-deoxy-2-fluoro-D-ribofuranosyl pyrimidine and purine nucleoside analogs II and III, wherein X is a halogen; Y is H or CH3; Z is a halogen, hydroxyl, ether, thiol, thioether, (un)substituted amine or alkyl; R1' is alkyl, vinyl, ethynyl; R2' and R3' can be same or different H, alkyl, arylalkyl, acyl, cyclic acetal such as 2',3'-O-isopropylidene or 2',3'-O-benzylidene, or 2',3'-cyclic carbonate; R4, R5, and R6 are independently H, halogen, hydroxyl, ether, thiol, thioether, N3,

(un)substituted amine, (un)substituted amido, alkyl, halogenated alkyl, alkenyl, halogenated alkenyl, alkynyl, halogenated alkynyl, hydroxy alkyl, alkoxy are prepared and are potential anti-HCV agents. Specifically, IV was prepared (no yield, claimed) via condensation, alkylation and stereoselective fluorination reactions and can exhibit potential use as an anti-HCV agent.

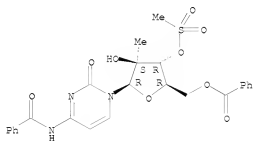
IT 874638-81-0P

RI: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of alkyl-substituted 2-deoxy-2-fluoro-D-ribofuranosyl pyrimidine and purine nucleoside analogs via condensation of the lactone to nucleosides)

RN 874638-81-0 CAPLUS

CN Benzamide, N-[1-[3-O-benzoyl-2-C-methyl-3-O-(methylsulfonyl)-β-D-arabinofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (CA INDEX NAME)

Absolute stereochemistry.



L6 ANSWER 41 OF 58 CAPLUS COPYRIGHT 2008 ACS ON STN

AN 2005:1151389 CAPLUS

DN 145:271979

TI NM 283, an efficient prodrug of the potent anti-HCV agent

2'-C-methylcytidine

AU Piera, C.; Benzaria, S.; Amador, A.; Moussa, A.; Mathieu, S.; Storer, R.; Gosselin, G.

CS Laboratoire Cooperatif Idenix, CNRS, Université Montpellier II, Montpellier, 3, Fr.

SO Nucleosides, Nucleotides & Nucleic Acids (2005), 24(5-7), 767-770

CODEN: NNNAFY; ISSN: 1525-7770

PB Taylor & Francis, Inc.

DI Journal

LA English

OS CASREACT 145:271979

AB In order to improve the oral bioavailability of 2'-C-methylcytidine, a potent anti-HCV agent, the corresponding 3'-O-L-valinyl ester derivative (NM 283) has been synthesized. Based on its ease of synthesis and its physicochem. properties, NM 283 has emerged as a promising antiviral drug for treatment of chronic HCV infection.

IT 23643-36-9P 31448-54-1P 640725-70-8P

642075-42-1P

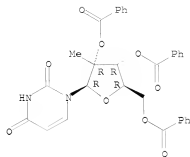
RI: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of NM 283 as efficient prodrug of potent anti-HCV agent 2'-C-methylcytidine)

RN 23643-36-9 CAPLUS

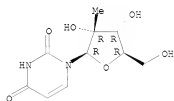
CN 2,4-(1H,3H)-Pyrimidinedione, 1-(2,3,5-tri-O-benzoyl-2-C-methyl-β-D-ribofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 31448-54-1 CAPLUS
CN Uridine, 2'-C-methyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

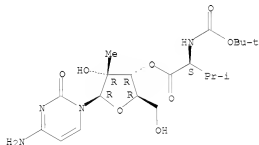


```

RN      640725-70-8  CAPLUS
CN      1-Valine, N-[(1,1-dimethylethoxy)carbonyl]-, 3'-ester with
        2'-C-methylcytidine (CA INDEX NAME)

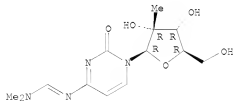
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Absolute stereochemistry.



RN 642075-42-1 CAPLUS
CN Cytidine, N-[(dimethylamino)methylene]-2'-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



IT 20724-73-6P
RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent);

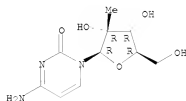
USES (Uses)

(preparation of NM 283 as efficient prodrug of potent anti-HCV agent 2'-C-methylcytidine)

RN 20724-73-6 CAPLUS

CN Cytidine, 2'-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.



IT 640725-71-9P

RL: FRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);

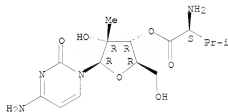
BIOL (Biological study); PREP (Preparation); USES (Uses)

(prodrug preparation of NM 283 as efficient prodrug of potent anti-HCV agent 2'-C-methylcytidine)

RN 640725-71-9 CAPLUS

CN L-Valine, 3'-ester with 2'-C-methylcytidine, hydrochloride (1:2) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



● 2 HCl

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 42 OF 58 CAPLUS COPYRIGHT 2008 ACS ON STN

AN 2005:684531 CAPLUS

DN 143:431740

TI Emerging drugs for chronic hepatitis C

AU Bhopale, Girish Mahadeorao; Nanda, Rabindra Kumar

CS Research and Development Division, Hindustan Antibiotics Limited, Pimpri,
Pune, 411019, India

SO Hepatology Research (2005), 32(3), 146-153

CODEN: HPASDH; ISSN: 1386-6346

PB Elsevier B.V.

DT Journal; General Review

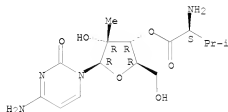
LA English

AB A review. Hepatitis C virus (HCV) is a major cause of chronic hepatitis, liver cirrhosis and hepatocellular carcinoma worldwide. A combination therapy comprising pegylated interferon and ribavirin currently represents the most effective therapy for chronic HCV infection. The limitations of this current therapy mainly its efficacy and significant side effects have prompted the development of new drugs. Few categories of therapeutic agents appear promising for future therapy, e.g. novel interferons, ribavirin analogs, antisense oligonucleotides, short interfering RNAs, ribozymes, enzyme inhibitors, immunomodulatory agents, antifibrotic agents, therapeutic vaccines and antibodies. Few drugs belong to afore-mentioned categories have already reached the different clin. phases of development. The

present article highlights the status of current available therapies and emerging drugs for the treatment of hepatitis C.

IT 640723-71-9, NM 283
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (NM283 proved promising therapeutic effect in treating chronic hepatitis C patient)
 RN 640723-71-9 CAPLUS
 CN L-Valine, 3'-ester with 2'-C-methylcytidine, hydrochloride (1:2) (CA INDEX NAME)

Absolute stereochemistry. Rotation (*).

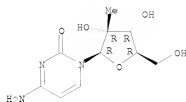


● 2 HCl

RE.CNT 64 THERE ARE 64 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 43 OF 58 CAPLUS COPYRIGHT 2008 ACS ON STN
 AN 2005:648160 CAPLUS
 DN 143:248607
 TI Design, Synthesis, and Antiviral Activity of 2'-Deoxy-2'-fluoro-2'-C-methyl-cytidine, a Potent Inhibitor of Hepatitis C Virus Replication
 AU Clark, Jeremy L.; Hollecker, Laurent; Mason, J. Christian; Stuyver, Lieven J.; Tharnish, Phillip M.; Lostia, Stefania; McBrayer, Tamara R.; Schinazi, Raymond F.; Watanabe, Kyolchi A.; Otto, Michael J.; Furnan, Phillip A.; Stec, Wojciech J.; Patterson, Steven E.; Pankiewicz, Krzysztof W.
 CS Pharmasset, Inc., Princeton, NJ, 08540, USA
 SO Journal of Medicinal Chemistry (2005), 48(17), 5504-5508
 CODEN: JMCNAR; ISSN: 0022-2623
 PB American Chemical Society
 DT Journal
 LA English
 OS CASREACT 143:248607
 AB The pyrimidine nucleoside- β -D-2'-deoxy-2'-fluoro-2'-C-methylcytidine (I) was designed as a hepatitis C virus RNA-dependent RNA polymerase (HCV RdRp) inhibitor. The title compound was obtained by a DAST fluorination of N4-benzoyl-1-(2-methyl-3,5-di-O-benzoyl- β -D-arabinofuranosyl)cytosine to provide N4-benzoyl-1-(2-fluoro-2-methyl-3,5-di-O-benzoyl- β -D-ribofuranosyl)cytosine. The protected 2'-C-methylcytidine was obtained as a byproduct from the DAST fluorination and allowed for the preparation of two Biol. active compds. from a common precursor. Compound I and 2'-C-methylcytidine were assayed in a sub-genomic HCV replicon assay system and found to be potent and selective inhibitors of HCV replication. Compd.I shows increased inhibitory activity in the HCV replicon assay compared to 2'-C-methylcytidine and low cellular toxicity.
 IT 20724-73-6
 RL: PAC (Pharmacological activity); BIOL (Biological study)
 (design, synthesis via fluorination, and antiviral activity of 2'-deoxy-2'-fluoro-2'-C-methyl-cytidine, a potent inhibitor of Hepatitis C virus replication)
 RN 20724-73-6 CAPLUS
 CN Cytidine, 2'-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.



IT 817204-35-6P 863329-62-8P 863329-64-0P

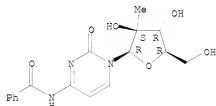
RL: RCT (Reactant); SEN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(design, synthesis via fluorination, and antiviral activity of 2'-deoxy-2'-fluoro-2'-C-methyl-cytidine, a potent inhibitor of Hepatitis C virus replication)

RN 817204-35-6 CAPLUS

CN Benzamide, N-[1,2-dihydro-1-(2-C-methyl-beta-D-arabinofuranosyl)-2-oxo-4-pyrimidinyl]- (CA INDEX NAME)

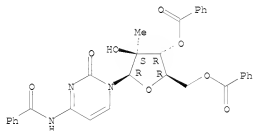
Absolute stereochemistry. Rotation (+).



RN 863329-62-8 CAPLUS

CN Benzamide, N-[1-(3,5-di-O-benzoyl-2-C-methyl-beta-D-arabinofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]- (CA INDEX NAME)

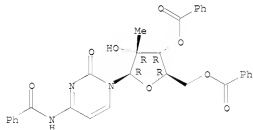
Absolute stereochemistry. Rotation (+).



RN 863329-64-0 CAPLUS

CN Cytidine, N-benzoyl-2'-C-methyl-, 3',5'-dibenzoate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 44 OF 58 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2005:34765 CAPLUS

DN 142:94074

TI Preparation of modified fluorinated (2'R)-2'-deoxy-2'-fluoro-2'-C-methyl nucleoside analogs as antiviral agents

IN Clark, Jeremy

PA Pharmasset, Ltd., Barbados

SO PCT Int. Appl., 228 pp.

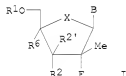
CODEN: PIKXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005003147	A2	20050113	WO 2004-US12472	20040421
	WO 2005003147	A3	20050303		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BE, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, ME, NA, NI, NG, NL, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SI, SJ, TJ, TM, TW, TR, TT, UA, US, UG, UZ, VC, VN, YU, ZA, ZM, ZW			
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	AU 2004253860	A1	20050113		
	CA 2527657	A1	20050113	CA 2004-2527657	20040421
	US 20050009737	A1	20050113	US 2004-828753	20040421
	EP 1633766	A2	20060315	EP 2004-775900	20040421
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR			
	BR 2004010846	A	20060627	BR 2004-10846	20040421
	CN 1816558	A	20060809	CN 2004-80019148	20040421
	JP 2006526629	T	20061124	JP 2006-513231	20040421
	MX 2005PA12788	A	20060222	MX 2005-PA12788	20051125
	IN 2005DN06087	A	20060509	IN 2005-DN06087	20051227
	WO 200506221	A	20051228	WO 2005-6221	20051228
	US 20080070861	A1	20080320	US 2007-854218	20070912
PRAI	US 2003-474368P	P	20030530		
	US 2004-828753	A3	20040421		
	WO 2004-US12472	W	20040421		
OS	MARFAT 142:94074				
GI					

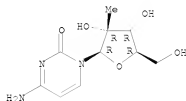


AB The disclosed invention provides nucleoside analogs I, wherein B is purine and pyrimidine nucleobase; X is O, S, CH₂, Se, NH, N-alkyl, CHW, C(W)2; W is F, Cl, Br, Iodo; R₁ is H, phosphate, H-phosphonate, acyl, Ph, alkyl, carboxyalkylamino, sulfonate ester, peptide, amino acid, sugar residue; R₂ and R₂' are independently H, alkyl, alkenyl, alkynyl, vinyl, N₃, CN, halogen, NO₂, ester, alkoxy, thioalkyl, sulfoxide, sulfonyl; R₆ is alkyl, CN, Me, OMe, OEt, CH₂OH, CH₂F, N₃, CHCN, CH₂N₃, CH₂NH₂, CH₂NHMe, CH₂NMe₂, alkylene, and methods of treating a Flaviviridae infection, including hepatitis C virus, West Nile Virus, yellow fever virus, and a rhinovirus infection in a host, including animals, and especially human, using a (2'R)-2'-deoxy-2'-fluoro-2'-C-Me nucleosides, or a pharmaceutically acceptable salt or prodrug thereof. Thus, (2'R)-2'-deoxy-2'-fluoro-2'-C-methylcytidine was prepared and tested as antiviral agent. The effects the nucleoside analogs tested on human bone

marrow cells are reported. (2'R)-2'-deoxy-2'-fluoro-2'-C-methylcytidine shows activity against Rhinovirus, West Nile virus, Yellow Fever virus, and Dengue virus. Cytotoxicity and effect of nucleoside analogs on human bone marrow cells are reported.

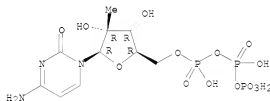
IT 20724-73-6 374750-28-4
 RI: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (preparation of modified fluorinated (2'R)-2'-deoxy-2'-fluoro-2'-C-Me nucleoside analogs as antiviral agents)
 RN 20724-73-6 CAPLUS
 CN Cytidine, 2'-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.



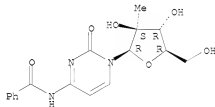
RN 374750-28-4 CAPLUS
 CN Cytidine 5'-(tetrahydrogen triphosphate), 2'-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.



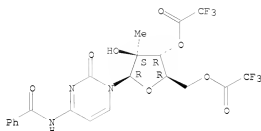
IT 817204-35-6P 817204-36-7P
 RI: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of modified fluorinated (2'R)-2'-deoxy-2'-fluoro-2'-C-Me nucleoside analogs as antiviral agents)
 RN 817204-35-6 CAPLUS
 CN Benzamide, N-[1,2-dihydro-1-[(2-C-methyl-β-D-arabinofuranosyl)-2-oxo-4-pyrimidinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 817204-36-7 CAPLUS
 CN Benzamide, N-[1,2-dihydro-1-[(2-C-methyl-3,5-bis-O-(trifluoroacetyl)-β-D-arabinofuranosyl)-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

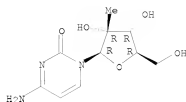
Absolute stereochemistry.



L6 ANSWEER 45 OF 58 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2004:817630 CAPLUS
 DN 141:307495
 TI Use of nucleoside compounds and PALA for the treatment of
 flaviviridae infections
 IN Stuyver, Lieven J.
 PA Pharmasset Ltd., Barbados
 SO PCT Int. Appl., 120 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FANY.CNT 1

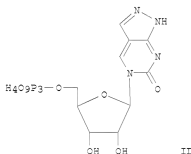
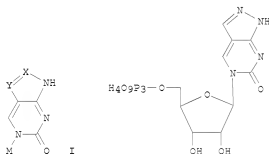
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004084796	A2	20041007	WO 2004-IB1429	20040329
WO 2004084796	A3	20060406		
W:				
AZ, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NZ, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SV, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004224575	A1	20041007	AU 2004-224575	20040329
CA 2529311	A1	20041007	CA 2004-2529311	20040329
US 20050049204	A1	20050303	US 2004-812448	20040329
EP 1626692	A2	20060222	EP 2004-724085	20040329
R:				
AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
BR 2004008846	A	20060704	BR 2004-8846	20040329
JP 2006924227	T	20061026	JP 2006-306588	20040329
CN 1980678	A	20070613	CN 2004-80011746	20040329
MX 2005PAI0419	A	20060531	MX 2005-PAI0419	20050928
PRAI US 2003-458635P	P	20030328		
WO 2004-IB1429	W	20040329		
OS MARPAT 141:307495				
AB The invention discloses a composition for and a method of treating Flaviviridae infections, e.g. bovine viral diarrhoea virus, dengue Virus, West Nile virus, and hepatitis C virus, as well as abnormal cellular proliferation, in a host, including animals, and especially humans, using a nucleoside compound (Markush included) or N-(phosphonoacetyl)-L-aspartate (PALA), or a pharmaceutically acceptable salt or prodrug thereof.				
IT 20724-73-6				
RI: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (nucleoside compds. and PALA for treatment of flaviviridae infections)				
RN 20724-73-6 CAPLUS				
CN Cytidine, 2'-C-methyl- (CA INDEX NAME)				

Absolute stereochemistry.



16 ANSWER 46 OF 58 CAPLUS COPYRIGHT 2008 ACS ON STM
 AN 2004:780543 CAPLUS
 DN 141:296247
 TI Preparation of cytidine nucleoside analogs as antiviral agents
 IN Girardet, Jean-Luc; Koh, Yung-Hyo; An, Haoyun; Hong, Zhi
 PA Ribapharm Inc., USA
 SO PCT Int. Appl., 59 pp.
 CODEN: PIXXD2
 DI Patent
 LA English
 FAN.CWT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004080466	A1	20040923	WO 2003-US6992	20030307
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, ME, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RM:	GR, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2003225705	A1	20040930	AU 2003-225705	20030307
PRAI WO 2003-US6992	A	20030307		
OS MARPAT 141:296247				
GI				

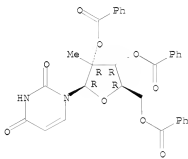


AB Cytidine analogs I, wherein -X=Y- is -N=N-, -CH=N-, -N=CH- or -CH=CH-, wherein Z is H, halogen, or alkyl, and wherein M is a sugar or sugar analog; wherein the compound has a D-configuration or an L-configuration; with the proviso that where M is a substituted sugar with a ribofuranose ring having a heteroatom and substituents R1 and R2 on the C3'-atom, R3 and R4 on the C2'-atom, and R5 on the C5'-atom, R1-R4 together are not independently H, OH, F, NH2, N3, O-hydrocarbyl, or a reporter moiety, when the heteroatom is O, S, Se, SO, N-alkyl, or CH2, and when R5 is OH, SH, NH2, monophosphate, diphosphate, triphosphate, thiophosphate, or boranophosphate; and with the further proviso that M does not comprise a cyclopropenyl group, a morpholino group, or M is not a phosphoryl-methoxyethyl, their prodrugs and/or metabolites are employed as pharmaceutically active compds. for treatment of diseases responsive to such compds. Particularly preferred diseases include viral diseases (e.g., HCV infection) and neoplasms (no biol. data). Thus

nucleoside analog II was prepared and tested as antiviral agent. The virus is an HCV virus, an HIV virus, an RSV virus, an influenza virus, or a an HBV virus.

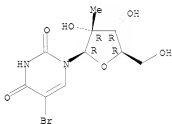
IT 23643-36-9
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of cytidine nucleoside analogs as antiviral agents)
 RN 23643-36-9 CAPLUS
 CN 2,4(1H,3H)-Pyrimidinedione, 1-(2,3,5-tri-O-benzoyl-2-C-methyl- β -D-ribofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



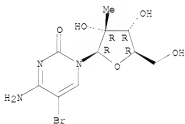
IT 760965-52-4P 760965-53-3P 760965-55-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of cytidine nucleoside analogs as antiviral agents)
 RN 760965-52-4 CAPLUS
 CN Uridine, 5-bromo-2'-C-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



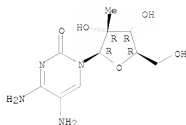
RN 760965-53-5 CAPLUS
 CN Cytidine, 5-bromo-2'-C-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 760965-55-7 CAPLUS
 CN Cytidine, 5-amino-2'-C-methyl- (9CI) (CA INDEX NAME)

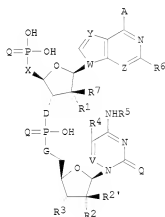
Absolute stereochemistry.



RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 47 OF 58 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2004:652668 CAPLUS
DN 141:167739
TI Diribonucleotides as specific viral RNA-polymerase inhibitors for the
treatment or prevention of viral infections
IN Wu, Jim Zhen; An, Haoyun; Hong, Zhi
PA USA
SO U.S. Pat. Appl. Publ., 12 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 20040158054	A1	20040812	US 2003-360218	20030207
PRAI US 2003-360218		20030207		
OS MARPAT 141:167739				
GI				



I

AB The invention discloses compds. and methods using dinucleotide compds. I
[A = H, OR, SR, NH2, or NHR; Q = O or S; V, W, Y, and Z = CH or N; X = O,
S, NR, etc.; D and G = null, CH2, O, etc.; R1, R2, R2', R3 = H, OR,
halogen, CF3 etc.; R4 = R; R5 = H, NH2, NHR, etc.; R6 = H, NH2, NHCOR,
etc.; R7 = H, OR, SR, halogen, etc.; R = H, (un)substituted alkyl, aryl,
etc.] comprising a first and second nucleoside. The dinucleotide inhibits
viral RNA polymerase and at least one of the nucleosides exhibits
antiviral activity when cleaved from the dinucleotide.

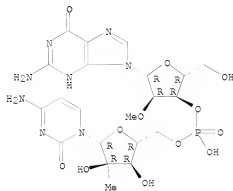
IT 735268-87-82
RI: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
(diribonucleotides as specific viral RNA-polymerase inhibitors for
treatment or prevention of viral infections)

RN 735268-87-8 CAPLUS

10/609,298

CN Cytidine, 2'-O-methylguanylyl-(3'→5')-2'-C-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



II 735268-88-9

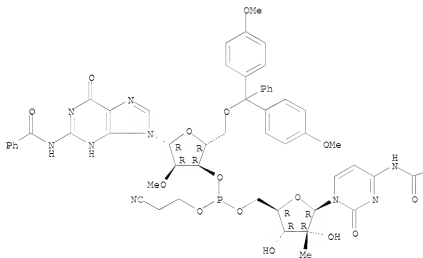
RI: RCT (Reactant); RACT (Reactant or reagent)
(diribonucleotides as specific viral RNA-polymerase inhibitors for
treatment or prevention of viral infections)

RN 735268-88-9 CAPLUS

CN Cytidine, N-benzoyl-5'-O-[[bis(4-methoxyphenyl)phenylmethyl]-P(O)-(2-
cyanoethyl)-P-doxo-2'-O-methylguanylyl-(3'→5')-N-benzoyl-2'-C-
methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

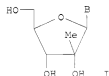
PAGE 1-A



Ph

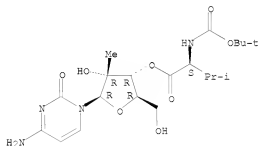
L6 ANSWER 48 OF 58 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2004:566635 CAPLUS
 DN 141:89323
 TI Process for the production of 3'-nucleoside prodrugs
 IN Storer, Richard; Moussa, Adel; Mathieu, Steven; Qu, Lin
 PA Idenix Cayman Limited, Cayman I.
 SO PCT Int. Appl., 57 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004058792	A1	20040715	WO 2003-US41603	20031223
N: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CM, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, ME, SD, SE, SI, SZ, UG, ZM, ZW, AM, AE, BY, KG, KZ, MD, RU, T, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2511616	A1	20040715	CA 2003-2511616	20031223
AU 2003300434	A1	20040722	AU 2003-300434	20031223
US 20040181051	A1	20040916	US 2003-746395	20031223
EP 1575971	A1	20050921	EP 2003-814400	20031223
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003016968	A	20051025	BR 2003-16968	20031223
CN 1751058	A	20060322	CN 2003-80109820	20031223
JP 2006514038	T	20060427	JP 2004-562599	20031223
NZ 540913	A	20080229	NZ 2003-540913	20031223
ZA 2005005040	A	20060426	ZA 2005-5040	20050621
NO 2005003557	A	20050908	NO 2005-3557	20050720
PRAI US 2002-436150P	P	20021223		
WO 2003-US41603	W	20031223		
OS CASREACT 141:89323; MARPAT 141:89323				
GI				



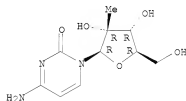
- AB Provided is a single-step process for the regioselective 3'-acylation of a ribofuranosyl 2'- or 3'-branched nucleosides I, wherein B is nucleobase. These compds. are useful as antiviral agents, and in particular, can be used to treat Flaviviridae infections in a host in need thereof (no data). Thus, 9-(2'-C-methyl-3'-O-valinoyl-β-D-ribofuranosyl)-6-N-methyladenine dihydrochloride was prepared via regioselective esterification of 9-(2'-C-methyl-β-D-ribofuranosyl)-6-N-methyladenine with N-(tert-butoxycarbonyl)-L-valine.
- IT 640725-70-8P
 RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
 (process for production of nucleoside prodrugs via regioselective esterification)
- RN 640725-70-8 CAPLUS
- CN 1-Valine, N-[(1,1-dimethylethoxy)carbonyl]-, 3'-ester with 2'-C-methylcytidine (CA INDEX NAME)

Absolute stereochemistry.



- IT 20724-73-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (process for production of nucleoside prodrugs via regioselective esterification)
- RN 20724-73-6 CAPLUS
- CN Cytidine, 2'-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.



- 16 ANSWER 49 OF 58 CAPLUS COPYRIGHT 2008 ACS ON STN
- AN 2004:453348 CAPLUS
- DN 141:17378
- TI Treatment of Flaviviridae infection with 2'-branched nucleosides and another mutation-inducing drug such as interferon
- IN Sommadossi, Jean-Pierre; La Colla, Paolo; Standsring, David; Bichko, Vadim; Qu, Lin
- PA Idenix (Cayman) Limited, Cayman I.; Università Degli Studi Di Cagliari
- SO PCT Int. Appl., 166 pp.
 CODEN: PIXXD2
- DI Patent
- LA English
- FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004046331	A2	20040603	WO 2003-US36714	20031117
	WO 2004046331	A3	20060302		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,				

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, ST, TJ, TM, TN, TR, TT, UA, UG, US, VC, VN, YU, ZA, ZM, ZW

RW: BM, GB, GM, KE, LS, MW, MZ, SD, SL, ST, TG, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2506129 A1 20040603 CA 2003-2506129 20031117
 AU 2003298658 A1 20040615 AU 2003-298658 20031117
 US 20030031388 A1 20030210 US 2003-715729 20031117
 EP 1576138 A2 20030921 EP 2003-796412 20031117

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MX, CY, AL, TR, BG, CZ, EE, HU, SK

BR 2003016363 A 20051004 BR 2003-16363 20031117
 JP 200619753 T 20060831 JP 2004-553823 20031117
 CN 1849142 A 20061018 CN 2003-60108747 20031117
 MX 2005PA05192 A 20050908 MX 2005-PA5192 20050513
 NO 2005002920 A 20050815 NO 2005-2920 20050615

FRAI US 2002-426875P F 20021115
 MC 2003-0536714 W 20031117

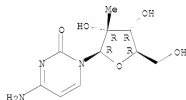
OS WARPAT 1411:7578

AB The present invention discloses a method for the treatment of Flaviviridae infection that includes the administration of a 2'-branched nucleoside, or a pharmaceutically acceptable prodrug and/or salt thereof, to a human in need of therapy in combination or alternation with a drug that directly or indirectly induces a mutation in the viral genome at a location other than a mutation of a nucleotide that results in a change from serine to a different amino acid in the highly conserved consensus sequence, *NSXKXSA/VSXWXXK*, of domain B of the RNA polymerase region, or is associated with such a mutation. The invention also includes a method to detect a mutant strain of Flaviviridae and a method for its treatment. Thus, in bovine viral diarrhoea virus (BVDV)-infected MDBK cells treated with β -D-2'-methylcytidine, viruses resistant to the nucleoside appeared. The drug resistance was associated with a mutation in the NS5B gene which resulted in an S405T substitution in the encoded RNA-dependent RNA polymerase. These mutant viruses were sensitive to Intron A (interferon α -2b). Intron A and β -D-2'-methylcytidine exhibited synergistic inhibitory activity on BVDV growth in MDBK cells.

IT 20724-73-6
 RI: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (treatment of Flaviviridae infection with 2'-branched nucleosides and another mutation-inducing drug such as interferon)

RN 20724-73-6 CAPLUS
 CN Cytidine, 2'-C-methyl- (CA INDEX NAME)

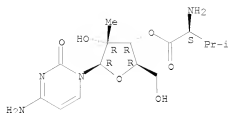
Absolute stereochemistry.



IT 640281-90-9
 RI: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (treatment of Flaviviridae infection with 2'-branched nucleosides and another mutation-inducing drug such as interferon)

RN 640281-90-9 CAPLUS
 CN L-Valine, 3'-ester with 2'-C-methylcytidine (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L6 ANSWER 50 OF 58 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2004:20697 CAPLUS

DN 140:87662

TI 2'- and 3'-nucleoside prodrugs for treating Flaviviridae infections

IN Commaodossi, Jean-pierre; La Colla, Paolo; Storer, Richard; Gosselin, Gilles

PA Idenix (Cayman) Limited, Cayman I.; Centre National de la Recherche Scientifique; Universita Degli Studi di Cagliari

SO FCT Int. Appl., 2498 pp.

CODEN: PIKX52

DT Patent

LA English

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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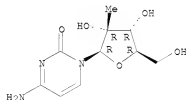
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OS	MARFAT 140:87662				

AB 2' And 3'-Prodrugs of 1', 2', 3', or 4'-branched β -D or β -L nucleosides, or their pharmaceutically acceptable salts and derivs., are described which are useful in the prevention and treatment of Flaviviridae infections and other related conditions. These modified nucleosides provide superior results against flaviviruses and pestiviruses, including hepatitis C virus and viruses generally that replicate through an RNA-dependent RNA reverse transcriptase. Compds., compns., methods and uses are provided for the treatment of Flaviviridae infection, including HCV infection, that include the administration of an effective amount of the prodrugs of the invention, or their pharmaceutically acceptable salts or derivs. These drugs may optionally be administered in combination or alternation with further antiviral agents to prevent or treat Flaviviridae infections and other related conditions. Preparation of compds. of the invention is included.

II 20724-73-6P
 RI: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); DMA (Drug mechanism of action); PAC (Pharmacological activity); PKI (Pharmacokinetics); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses).
 (nucleoside prodrugs for treating Flaviviridae infections)

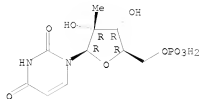
RN 20724-73-6 CAPLUS
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Absolute stereochemistry.



II 125911-78-6 396213-38-3
 RI: BSU (Biological study, unclassified); BIOL (Biological study)
 (nucleoside prodrugs for treating Flaviviridae infections)
 RN 125911-78-6 CAPLUS
 CN 5'-Uridylic acid, 2'-C-methyl- (9CI) (CA INDEX NAME)

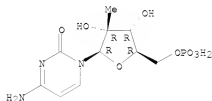
Absolute stereochemistry.



RN 386213-38-3 CAPLUS

CN 5'-Cytidylic acid, 2'-C-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



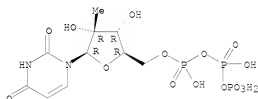
IT 125911-76-4 130993-73-0 640725-72-0

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
BIOL (Biological study)
(nucleoside prodrugs for treating Flaviviridae infections)

RN 125911-76-4 CAPLUS

CN Uridine 5'-(tetrahydrogen triphosphate), 2'-C-methyl- (9CI) (CA INDEX NAME)

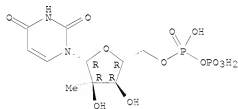
Absolute stereochemistry.



RN 150993-73-0 CAPLUS

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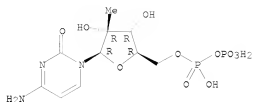
Absolute stereochemistry.



RN 640725-72-0 CAPLUS

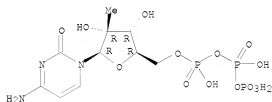
CN Cytidine 5'-(tri-hydrogen diphosphate), 2'-C-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



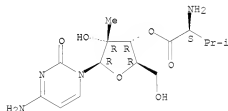
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 RL: BCU (Biological study, unclassified); PAC (Pharmacological activity);
 PKT (Pharmacokinetics); BIOL (Biological study)
 (nucleoside prodrugs for treating Flaviviridae infections)
 RN 374750-28-4 CAPLUS
 CN Cytidine 5'-(tetrahydrogen triphosphate), 2'-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.



IT 640725-71-9P
 RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); SPN (Synthetic
 preparation); THU (Therapeutic use); BIOL (Biological study); PREP
 (Preparation); USES (Uses)
 (nucleoside prodrugs for treating Flaviviridae infections)
 RN 640725-71-9 CAPLUS
 CN L-Valine, 3'-ester with 2'-C-methylcytidine, hydrochloride (1:2) (CA
 INDEX NAME)

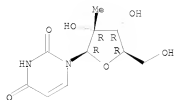
Absolute stereochemistry. Rotation (+).



● 2 HCL

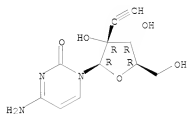
IT 31448-54-1 189413-99-2
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
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 RN 31448-54-1 CAPLUS
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Absolute stereochemistry. Rotation (+).



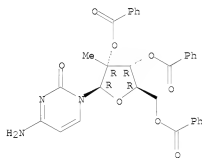
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CN Cytidine, 2'-C-ethynyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



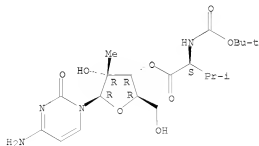
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RI: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(nucleoside prodrugs for treating Flaviviridae infections)
RN 640725-69-5 CAPLUS
CN Cytidine, 2'-C-methyl-, 2',3',5'-tribenzoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



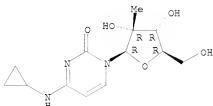
RN 640725-70-8 CAPLUS
CN L-Valine, N-[(1,1-dimethylethoxy)carbonyl]-, 3'-ester with
2'-C-methylcytidine (CA INDEX NAME)

Absolute stereochemistry.



II 622381-09-3
 RI: PAC (Pharmacological activity); THU (Therapeutic use); BIOI
 (Biological study); USES (Uses)
 (nucleoside prodrugs for treating Flaviviridae infections,
 and use with other agents)
 RN 622381-09-3 CAPLUS
 CN Cytidine, N-cyclopropyl-2'-C-methyl- (9CI) (CA INDEX NAME)

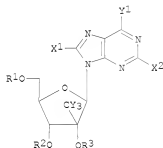
Absolute stereochemistry.



L6 ANSWER 51 OF 58 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2004:20696 CAPLUS
 DN 140:77365
 TI Preparation of modified 2'- and 3'-nucleoside prodrugs for treating
 Flaviviridae infections
 IN Sommadossi, Jean-pierre; La Colla, Paolo; Storer, Richard; Gosselin,
 Gilles
 PA Idenix (Cayman) Limited, Cayman I.; Università degli studi di Cagliari;
 Centre National de la Recherche Scientifique
 SO PCT Int. Appl., 201 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 4

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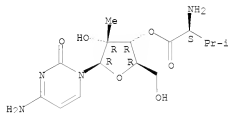
I

AB 2' And/or 3' prodrugs of 1', 2', 3' or 4'-branched-nucleosides I, wherein R1-R3 are independently H, phosphate, alkyl, acyl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-substituted aryl, sulfonate ester, benzyl, wherein the Ph group is optionally substituted with one or more substituents, alkylsulfonfyl, arylsulfonfyl, aralkylsulfonfyl, lipid, amino acid, carbohydrate, peptide, cholesterol; Y1 is hydrogen, bromo, chloro, fluoro, iodo, CN, OH, OR4, NH2, NHR4, NR4R5, SH or SR4; X1 and X2 are independently alkyl, CH3, CF3, CY3, 2-Br-Et, CH2F, CH2Cl, CH2CF3, CF2CF3, CF2CY3, CH2OH, alkenyl, alkynyl, COOH, COOR4, COO-alkyl, COO-aryl, CO-O-alkoxyalkyl, CONH2, CONHR4, CON(R4)2, halo, CN, N3, OH, OR4, NH2, NHR4, NR4R5, SH or SR4; Y is independently H, halo; and each R4 and R5 is independently hydrogen, acyl, alkyl, lower alkyl, alkenyl, alkynyl or cycloalkyl, and their pharmaceutically acceptable salts and derivs. are described. These prodrugs are useful in the prevention and treatment of Flaviviridae infections, including HCV infection, and other related conditions. Comps. and compns. of the prodrugs of the

present invention are described. Methods and uses are also provided that include the administration of an effective amount of the prodrugs of the present invention, or their pharmaceutically acceptable salts or derivs. These drugs may optionally be administered in combination or alternation with further anti-viral agents to prevent or treat Flaviviridae infections and other related conditions. Thus, antiviral activity of β -D-2'-C-methyl-7-methyl-6-phenyl-3,3a,5,8a-tetrahydro-1,3,4,5,7a-penta-aza-s-indacen-8-one is reported.

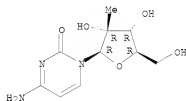
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 (preparation of modified and nucleoside prodrugs for treating flaviviridae infections)
 RN 640281-90-9 CAPLUS
 CN L-Valine, 3'-ester with 2'-C-methylcytidine (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IT 20724-73-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of modified and nucleoside prodrugs for treating flaviviridae infections)
 RN 20724-73-6 CAPLUS
 CN Cytidine, 2'-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.



L6 ANSWER 52 OF 58 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2004:20443 CAPLUS
 DN 140:70984
 TI 2'-C-methyl-3'-O-L-valine ester ribofuranosyl cytidine for treatment of flaviviridae infections
 IN Sommadossi, Jean-Pierre; La Colla, Paolo
 PA Idenix (Cayman) Limited, Cayman I.; Universita Degli Studi di Cagliari
 SO PCT Int. Appl., 110 pp.
 CODEN: PIKXD2
 DT Patent
 LA English
 FAN.CNT 4

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WO 2004002422	A3	20050407		
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AE, AG, AL, AM, AT, AU, AZ, BA, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GR, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2489532	A1	20040108	CA 2003-2489532
AU 20030248748	A1	20040119	AU 2003-248748
US 20040077587	A1	20040422	US 2003-607909
EP 1536804	A2	20050608	EP 2003-762183
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
CN 1678326	A	20051005	CN 2003-820701
JP 2005333824	T	20051110	JP 2004-518041
US 20070015905	A	20070118	US 2003-609298
BR 2003012278	A	20070619	BR 2003-12278
NZ 537662	A	20071026	NZ 2003-537662
CN 101172992	A	20080507	CN 2007-10193301
CN 101172993	A	20080507	CN 2007-10199501
WO 2005020884	A2	20050310	WO 2004-0515395
WO 2005020884	A3	20060622	20040514
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, JP, KE, KG, KP, KR, KZ, LC, LG, LR, LS, LT, LV, LY, MA, MD, MG, MK, MN, MO, MP, MQ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SJ, ST, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
EP 1656093	A2	20060517	EP 2004-776022
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR			
US 20070027065	A1	20070201	US 2004-5468
US 20070027104	A1	20070201	US 2004-5469
US 20070027066	A1	20070201	US 2004-5470
US 20070032449	A1	20070208	US 2004-5441
US 20070032407	A1	20070208	US 2004-5473
US 7192938	B2	20070320	
US 20070037735	A1	20070215	US 2004-5442
US 20070042939	A1	20070222	US 2004-5445
US 20070042991	A1	20070222	US 2004-5447
US 7365057	B2	20080429	
US 20070042940	A1	20070222	US 2004-5467
US 20070042990	A1	20070222	US 2004-5471
US 20070060503	A1	20070315	US 2004-5440
US 20070060498	A1	20070315	US 2004-5444
US 20070060504	A1	20070315	US 2004-5446
US 20070060541	A1	20070315	US 2004-5466
US 20070060505	A1	20070315	US 2004-5472
MX 2004-PAL2802	A	20050419	MX 2004-PAL2802
NO 2005000490	A	20050127	NO 2005-490
US 20070275883	A1	20071129	US 2006-516928
IN 2007DN08806	A	20080111	IN 2007-DN8806
FRAI US 2002-392351P			
US 2003-466194P	P	20030428	
US 2003-470949P	P	20030514	
US 2002-392350P	P	20020628	
CN 2003-820501	A3	20030627	
CN 2003-820701	A3	20030627	
US 2003-607909	A1	20030627	
US 2003-608907	A1	20030627	
US 2003-609298	A1	20030627	
WO 2003-US20431	W	20030627	
WO 2004-US15395	W	20040514	
IN 2005-DN344	A3	20050128	
OS NARFAL 14070984			
AB The 3'-valine ester of β -D-2'-C-methyl-ribofuranosyl cytidine provides superior results against flaviviruses and pestiviruses, including hepatitis C virus. Based on this discovery, compds., compns., methods and uses are provided for the treatment of flaviviridae, including HCV, that include the administration of an effective amount of val-mCyd or its salt,			

ester, prodrug or derivative, optionally in a pharmaceutically acceptable carrier. In an alternative embodiment, val-mCyd is used to treat any virus that replicates through an RNA-dependent RNA polymerase. Several examples are provided of the pharmacol., mechanism of action, metabolism, side effects, and clin. efficacy of the title compound

IT 640281-90-9D, salts 642075-50-1 642075-51-2

642075-52-3 642075-53-4 642075-54-5

642075-55-6 642075-56-7 642075-57-8

642075-58-9 642075-59-0 642075-60-3

642075-61-4 642075-62-5 642075-63-6

642075-64-7 642075-65-8 642075-66-9

642075-67-0 642075-68-1 642075-69-2

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642075-74-9 642075-75-0 642075-76-1

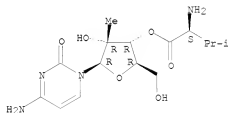
642075-77-2

RI: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ribofuransylcytidine methylvaline ester combined with other
antivirals for treatment of flaviviridae infections)

RN 640281-90-9 CAPLUS

CN L-Valine, 3'-ester with 2'-C-methylcytidine (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 642075-50-1 CAPLUS

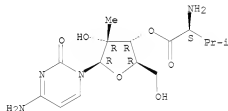
CN L-Valine, 3'-ester with 2'-C-methylcytidine, 4-methylbenzenesulfonate
(salt) (9CI) (CA INDEX NAME)

CM 1

CRN 640281-90-9

CMF C15 H24 N4 O6

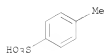
Absolute stereochemistry. Rotation (+).



CM 2

CRN 104-15-4

CMF C7 H8 O3 S



RN 642075-51-2 CAPLUS

McIntosh

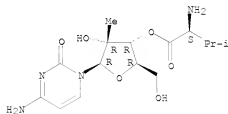
10/609,298

CN L-Valine, 3'-ester with 2'-C-methylcytidine, methanesulfonate (salt) (9CI)
(CA INDEX NAME)

CM 1

CRN 640281-90-9
CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).



CM 2

CRN 75-75-2
CMF C H4 O3 S

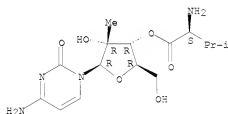


RN 642075-52-3 CAPLUS
CN L-Valine, 3'-ester with 2'-C-methylcytidine, acetate (salt) (9CI) (CA
INDEX NAME)

CM 1

CRN 640281-90-9
CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).



CM 2

CRN 64-19-7
CMF C2 H4 O2



RN 642075-53-4 CAPLUS
CN L-Valine, 3'-ester with 2'-C-methylcytidine, 2-hydroxy-1,2,3-

McIntosh

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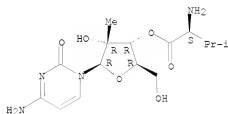
propanetricarboxylate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 640281-90-9

CMF C15 H24 N4 O6

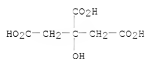
Absolute stereochemistry. Rotation (+).



CM 2

CRN 77-92-9

CMF C6 H8 O7



RN 642075-54-5 CAPLUS

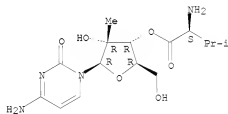
CN L-Valine, 3'-ester with 2'-C-methylcytidine, propanedioate (salt) (9CI)
(CA INDEX NAME)

CM 1

CRN 640281-90-9

CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).



CM 2

CRN 141-82-2

CMF C3 H4 O4

HO₂C-CH₂-CO₂H

RN 642075-55-6 CAPLUS

CN L-Valine, 3'-ester with 2'-C-methylcytidine, (2R,3R)-2,3-dihydroxybutanedioate (salt) (9CI) (CA INDEX NAME)

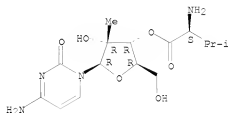
CM 1

McIntosh

10/609,298

CRN 640281-90-9
CMF C15 H24 N4 O6

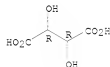
Absolute stereochemistry. Rotation (+).



CM 2

CRN 87-69-4
CMF C4 H6 O6

Absolute stereochemistry.



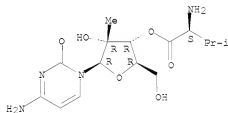
RN 642075-56-7 CAPLUS

CN L-Valine, 3'-ester with 2'-C-methylcytidine, butanedioate (salt) (9CI)
(CA INDEX NAME)

CM 1

CRN 640281-90-9
CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).



CM 2

CRN 110-15-6
CMF C4 H6 O4

HO₂C-CH₂-CH₂-CO₂H

RN 642075-57-8 CAPLUS

CN L-Valine, 3'-ester with 2'-C-methylcytidine, benzoate (salt) (9CI) (CA
INDEX NAME)

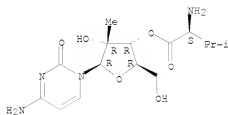
CM 1

McIntosh

10/609,298

CRN 640281-90-9
CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).



CM 2

CRN 65-85-0
CMF C7 H6 O2

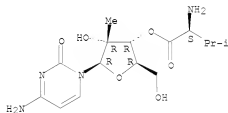


RN 642075-58-9 CAPLUS
CN L-Ascorbic acid, compd. with L-valine 3'-ester with 2'-C-methylcytidine
(9CI) (CA INDEX NAME)

CM 1

CRN 640281-90-9
CMF C15 H24 N4 O6

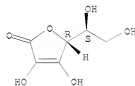
Absolute stereochemistry. Rotation (+).



CM 2

CRN 50-81-7
CMF C6 H8 O6

Absolute stereochemistry.



RN 642075-59-0 CAPLUS

McIntosh

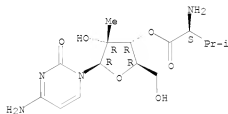
10/609,298

CN L-Valine, 3'-ester with 2'-C-methylcytidine, 2-oxopentanedioate (salt)
(9CI) (CA INDEX NAME)

CM 1

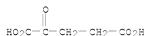
CRN 640281-90-9
CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).



CM 2

CRN 328-50-7
CMF C5 H6 O5



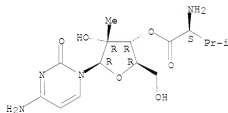
RN 642075-60-3 CAPLUS

CN L-Valine, 3'-ester with 2'-C-methylcytidine, 2,3-dihydroxypropyl phosphate
(salt) (9CI) (CA INDEX NAME)

CM 1

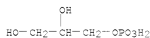
CRN 640281-90-9
CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).



CM 2

CRN 57-03-4
CMF C3 H9 O6 P



RN 642075-61-4 CAPLUS

CN L-Valine, 3'-ester with 2'-C-methylcytidine, formate (salt) (9CI) (CA
INDEX NAME)

McIntosh

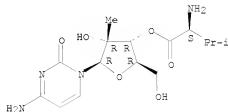
10/609,298

CM 1

CRN 640281-90-9

CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).



CM 2

CRN 64-18-6

CMF C H2 O2

O=CH-OH

RN 642075-62-5 CAPLUS

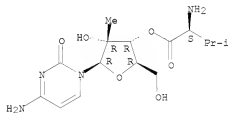
CN L-Valine, 3'-ester with 2'-C-methylcytidine, (2E)-2-butenedioate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 640281-90-9

CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).

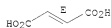


CM 2

CRN 110-17-8

CMF C4 H4 O4

Double bond geometry as shown.



RN 642075-63-6 CAPLUS

CN L-Valine, 3'-ester with 2'-C-methylcytidine, propanoate (salt) (9CI) (CA INDEX NAME)

CM 1

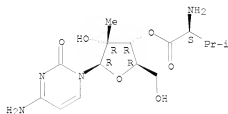
CRN 640281-90-9

CMF C15 H24 N4 O6

McIntosh

10/609,298

Absolute stereochemistry. Rotation (+).



CM 2

CRN 79-09-4

CMF C3 H6 O2



RN 642075-64-7 CAPLUS

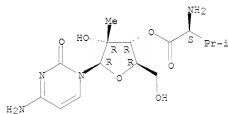
CN L-Valine, 3'-ester with 2'-C-methylcytidine, hydroxyacetate (salt) (9CI)
(CA INDEX NAME)

CM 1

CRN 640281-90-9

CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).



CM 2

CRN 79-14-1

CMF C2 H4 O3



RN 642075-65-8 CAPLUS

CN L-Valine, 3'-ester with 2'-C-methylcytidine, 2-hydroxypropanoate (salt)
(9CI) (CA INDEX NAME)

CM 1

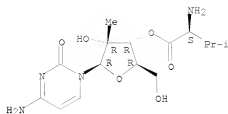
CRN 640281-90-9

CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).

McIntosh

10/609,298



CM 2

CRN 50-21-3
CMF C3 H6 O3

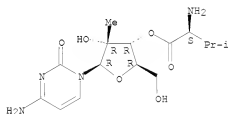


RN 642075-66-9 CAPLUS
CN L-Valine, 3'-ester with 2'-C-methylcytidine, 2-oxopropanoate (salt) (9CI)
(CA INDEX NAME)

CM 1

CRN 640281-90-9
CMF C13 H24 N4 O6

Absolute stereochemistry. Rotation (+).



CM 2

CRN 127-17-3
CMF C3 H4 O3



RN 642075-67-0 CAPLUS
CN L-Valine, 3'-ester with 2'-C-methylcytidine, ethanedioate (salt) (9CI)
(CA INDEX NAME)

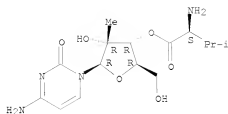
CM 1

CRN 640281-90-9
CMF C13 H24 N4 O6

Absolute stereochemistry. Rotation (+).

McIntosh

10/609,298



CM 2

CRN 144-62-7

CMF C2 H2 O4



RN 642075-68-1 CAPLUS

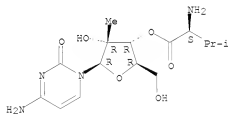
CN L-Valine, 3'-ester with 2'-C-methylcytidine, (2Z)-2-butenedioate (salt)
(9CI) (CA INDEX NAME)

CM 1

CRN 640281-90-9

CMF C13 H24 N4 O6

Absolute stereochemistry. Rotation (+).



CM 2

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



RN 642075-69-2 CAPLUS

CN L-Valine, 3'-ester with 2'-C-methylcytidine, 2-hydroxybenzoate (salt)
(9CI) (CA INDEX NAME)

CM 1

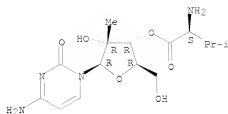
CRN 640281-90-9

CMF C13 H24 N4 O6

Absolute stereochemistry. Rotation (+).

McIntosh

10/609,298



CM 2

CRN 69-72-7

CMF C7 H6 O3



RN 642075-70-5 CAPLUS

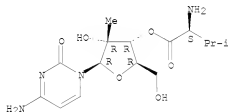
CN L-Valine, 3'-ester with 2'-C-methylcytidine, sulfate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 640281-90-9

CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).



CM 2

CRN 7664-93-9

CMF H2 O4 S



RN 642075-71-6 CAPLUS

CN L-Valine, 3'-ester with 2'-C-methylcytidine, nitrate (salt) (9CI) (CA INDEX NAME)

CM 1

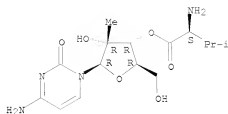
CRN 640281-90-9

CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).

McIntosh

10/609,298



CM 2

CRN 7697-37-2

CMF H N O3



RN 642075-72-7 CAPLUS

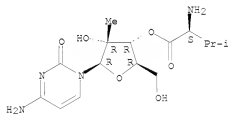
CN L-Valine, 3'-ester with 2'-C-methylcytidine, carbonate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 640281-90-9

CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).



CM 2

CRN 463-79-6

CMF C H2 O3



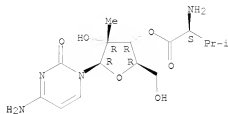
RN 642075-74-9 CAPLUS

CN L-Valine, 3'-ester with 2'-C-methylcytidine, hydrobromide (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

McIntosh

10/609,298

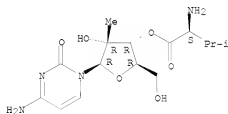


● x HBr

RN 642075-75-0 CAPLUS

CN L-Valine, 3'-ester with 2'-C-methylcytidine, hydriodide (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



● x HI

RN 642075-76-1 CAPLUS

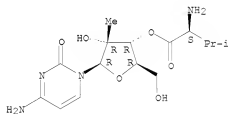
CN L-Valine, 3'-ester with 2'-C-methylcytidine, carbonate (2:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 640281-90-9

CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).



CM 2

CRN 463-79-6

CMF C H2 O3



McIntosh

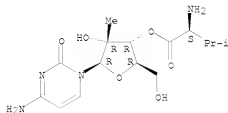
10/609,298

RN 642075-77-2 CAPLUS
CN L-Valine, 3'-ester with 2'-C-methylcytidine, phosphate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 640281-90-9
CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).



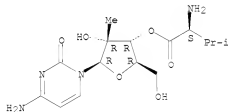
CM 2

CRN 7664-39-2
CMF H3 O4 P



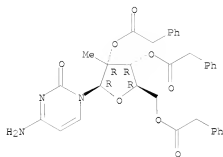
IT 640281-90-9P
RL: DNA (Drug mechanism of action); PAC (Pharmacological activity); PKT (Pharmacokinetics); SEN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
ribofuranosylcytidine methylvaline ester for treatment of flaviviridae infections)
RN 640281-90-9 CAPLUS
CN L-Valine, 3'-ester with 2'-C-methylcytidine (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



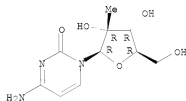
IT 642075-41-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(ribofuranosylcytidine methylvaline ester for treatment of flaviviridae infections)
RN 642075-41-0 CAPLUS
CN Cytidine, 2'-C-methyl-, 2',3',5'-tris(benzeneacetate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



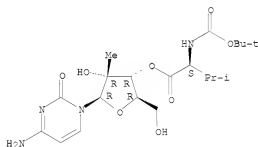
IT 20724-73-6P 640725-70-8P 642075-42-1P
 642075-43-2P 642075-44-3P 642075-48-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (ribofuranosylcytidine methylvaline ester for treatment of
 flaviviridae infections)
 RN 20724-73-6 CAPLUS
 CN Cytidine, 2'-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.



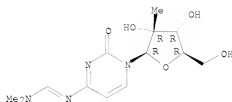
RN 640725-70-8 CAPLUS
 CN L-Valine, N-[(1,1-dimethylethoxy)carbonyl]-, 3'-ester with
 2'-C-methylcytidine (CA INDEX NAME)

Absolute stereochemistry.



RN 642075-42-1 CAPLUS
 CN Cytidine, N-[(dimethylamino)methylene]-2'-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry unknown.

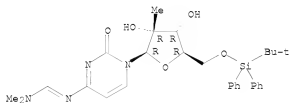


RN 642075-43-2 CAPLUS

CN Cytidine, N-[(dimethylamino)methylene]-5'-O-[(1,1-dimethylethyl)diphenylsilyl]-2'-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

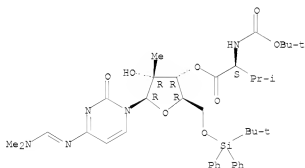


RN 642075-44-3 CAPLUS

CN L-Valine, N-[(1,1-dimethylethoxy)carbonyl]-, 3'-ester with 5'-O-[(1,1-dimethylethyl)diphenylsilyl]-N-[(dimethylamino)methylene]-2'-C-methylcytidine (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

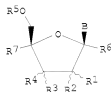


RN 642075-48-7 CAPLUS

CN Cytidine, 2'-C-methyl-N-(phenylacetyl)-, 2',3',5'-tris(benzeneacetate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

EP 1551421 A2 20050713 EP 2003-751777 20030617
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
 JP 200530943 T 20051013 JP 2004-515870 20030617
 US 20070004669 A1 20070104 US 2006-517295 20060615
 PRAI US 2002-390579P P 20020621
 WO 2003-US19172 W 20030617
 OS MARPAT 140:42424
 GI



AB The present invention provides nucleoside compds. I, wherein B is nucleobase; R1 is fluoromethyl, difluoromethyl, trifluoromethyl; R2 is H, F, amino, OH, SH, alkoxy, alkylcarbonyloxy, alkyl; R3 and R4 are independently H, Cn, N3, halogen, OR, SH, amino, alkoxy, alkylcarbonyloxy, alkenyl, alkynyl; R5 is H, alkylcarbonyl, P3O9H4, P2O6H3, phosphophonyl; R6 and R7 independently H, Me, hydroxymethyl, fluoromethyl; and certain derive thereof which are inhibitors of RNA-dependent RNA viral polymerase. These compds. are inhibitors of RNA-dependent RNA viral replication and are useful for the treatment of RNA-dependent RNA viral infection. They are particularly useful as inhibitors of hepatitis C virus (HCV) NS5B polymerase, as inhibitors of HCV replication, and/or for the treatment of hepatitis C infection. The invention also describes pharmaceutical compns. containing such nucleoside compds. alone or in combination with other agents active against RNA-dependent RNA viral infection, in particular HCV infection. Also disclosed are methods of inhibiting RNA-dependent RNA polymerase, inhibiting RNA-dependent RNA viral replication, and/or treating RNA-dependent RNA viral infection with the nucleoside compds. of the present invention. Thus, 2-amino-9-(2-C-fluoromethyl-β-D-ribofuranosyl)-3,9-dihydropurin-6-one was prepared and tested as inhibitor of RNA-dependent RNA viral polymerase. Title compds. tested in the HCV NS5B polymerase assay exhibited IC50's less than 100 μmol.

II 510765-51-2P 636581-91-4P 636581-92-3P
 636581-93-6P 636582-01-9P 636582-02-0P
 636582-03-1P 636582-04-2P

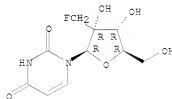
RI: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of nucleoside derive. as inhibitors of RNA-dependent RNA viral polymerase)

RN 510765-51-2 CAPLUS

CN Uridine, 2'-C-(fluoromethyl)- (CA INDEX NAME)

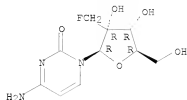
Absolute stereochemistry.



RN 636581-91-4 CAPLUS

CN Cytidine, 2'-C-(fluoromethyl)- (9CI) (CA INDEX NAME)

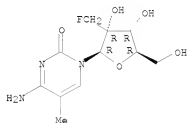
Absolute stereochemistry.



RN 636581-92-5 CAPLUS

CN Cytidine, 2'-C-(fluoromethyl)-5-methyl- (9CI) (CA INDEX NAME)

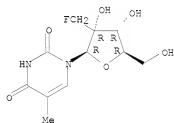
Absolute stereochemistry.



RN 636581-93-6 CAPLUS

CN Uridine, 2'-C-(fluoromethyl)-5-methyl- (9CI) (CA INDEX NAME)

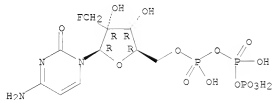
Absolute stereochemistry.



RN 636582-01-9 CAPLUS

CN Cytidine 5'-(tetrahydrogen triphosphate), 2'-C-(fluoromethyl)- (9CI) (CA INDEX NAME)

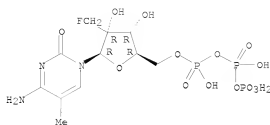
Absolute stereochemistry.



RN 636582-02-0 CAPLUS

CN Cytidine 5'-(tetrahydrogen triphosphate), 2'-C-(fluoromethyl)-5-methyl- (9CI) (CA INDEX NAME)

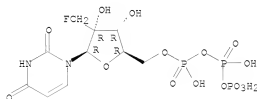
Absolute stereochemistry.



RN 636582-03-1 CAPLUS

CN Uridine 5'-(tetrahydrogen triphosphate), 2'-C-(fluoromethyl)- (9CI) (CA INDEX NAME)

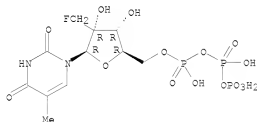
Absolute stereochemistry.



RN 636582-04-2 CAPLUS

CN Uridine 5'-(tetrahydrogen triphosphate), 2'-C-(fluoromethyl)-5-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L6 ANSWER 54 OF 58 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2003:892793 CAPLUS

DN 139:365176

TI Preparation of nucleoside derivatives for treating hepatitis C virus infection

IN Roberts, Christopher Don; Dyatkina, Natalia B.; Keicher, Jesse D.; Liehr, Sebastian Johannes Reinhard; Hanson, Eric Jason

PA Genelabs Technologies, Inc., USA

SO PCT Int. Appl., 182 pp.

CODEN: PIKXD2

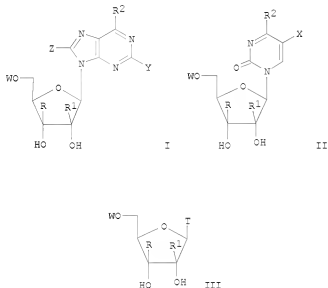
DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003093290	A2	20031113	WO 2003-US14237	20030506
	WO 2003093290	A3	20040318		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				

RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GM, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2484921	A1	20031113	CA 2003-2484921	20030506
AU 2003232071	A1	20031117	AU 2003-232071	20030506
US 20040063658	A1	20040401	US 2003-431631	20030506
EP 1501850	A2	20050202	EP 2003-747674	20030506
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK			
BR 2003009581	A	20050329	BR 2003-9581	20030506
CN 1653077	A	20050810	CN 2003-810239	20030506
JP 2005530759	T	20051013	JP 2004-501429	20030506
NZ 536123	A	20060929	NZ 2003-536123	20030506
MX 2004PA10983	A	20050214	MX 2004-PA10983	20041103
NO 2004005247	A	20041130	NO 2004-5247	20041130
PRAI US 2002-378624P	P	20020506		
US 2002-392871P	P	20020628		
WO 2003-0214237	W	20030506		
OS MARPAT 139:365176				
GI				
SE				



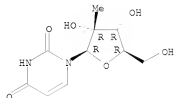
- AB Nucleosides I-III, wherein R and R1 are independently H, alkyl, alkenyl, alkynyl, provided that R and R1 are not both H; R2 is alkyl, cycloalkyl, alkenyl, alkynyl, acylamino, guanidino, amidino, thioacylamino, OH, alkoxyl, halo, nitro, aryl, heteroaryl, substituted amine; W is H, phosphate, phosphonate, acyl, alkyl, sulfonate, lipid, amino acid, sugar residue, peptide, cholesterol; X is H, halo, alkyl, substituted amine; Y is H, halo, OH, alkylthio, substituted amine; Z is H, halo, OH, alkyl, substituted amine; Z is nucleobase, were prepared as HCV RNA polymerase inhibitors and for treating hepatitis C virus infections. Thus, 2-(4-amino-pyrrolo[3,2-c]pyridin-1-yl)-5-hydroxymethyl-3-methyltetrahydro-furan-3,4-diol was prepared for treating hepatitis C virus infections (no data). Different kind of formulation such as tablet, capsule, suspension, injectable, and suppository formulation are reported.
- II 31448-54-IP 119410-84-3P 622380-51-2P
622380-52-3P 622380-56-7P 622380-57-8P
622380-59-0P 622380-60-3P 622380-61-4P
622380-89-6P 622380-90-9P 622381-09-3P
622381-10-6P
RI: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

10/609,298

(preparation of nucleoside derivs. for treating hepatitis
C virus infection)

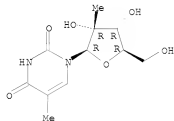
RN 31448-54-1 CAPLUS
CN Uridine, 2'-C-methyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



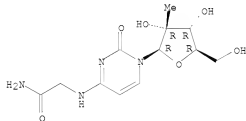
RN 119410-84-3 CAPLUS
CN Uridine, 5-methyl-2'-C-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



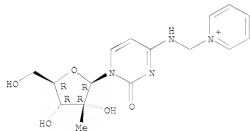
RN 622380-51-2 CAPLUS
CN Cytidine, N-(2-amino-2-oxoethyl)-2'-C-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 622380-52-3 CAPLUS
CN Pyridinium, 1-[[[1,2-dihydro-1-(2-C-methyl-β-D-ribofuranosyl)-2-oxo-4-pyrimidinyl]amino]methyl]- (CA INDEX NAME)

Absolute stereochemistry.



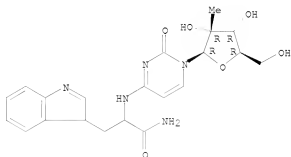
McIntosh

10/609,298

RN 622380-56-7 CAPLUS

CN Cytidine, N-(2-amino-1-(3H-indol-3-ylmethyl)-2-oxoethyl)-2'-C-methyl- (9CI) (CA INDEX NAME)

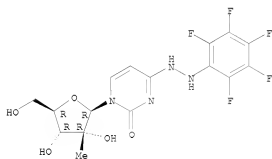
Absolute stereochemistry.



RN 622380-57-8 CAPLUS

CN Uridine, 2'-C-methyl-, 4-[(pentafluorophenyl)hydrazine] (9CI) (CA INDEX NAME)

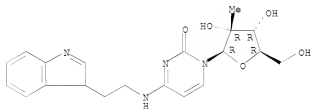
Absolute stereochemistry.



RN 622380-59-0 CAPLUS

CN Cytidine, N-[2-(3H-indol-3-yl)ethyl]-2'-C-methyl- (9CI) (CA INDEX NAME)

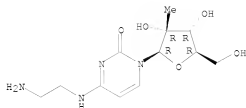
Absolute stereochemistry.



RN 622380-60-3 CAPLUS

CN Cytidine, N-(2-aminoethyl)-2'-C-methyl- (9CI) (CA INDEX NAME)

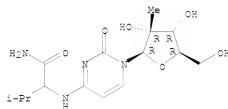
Absolute stereochemistry.



RN 622380-61-4 CAPLUS

CN Cytidine, N-[1-(aminocarbonyl)-2-methylpropyl]-2'-C-methyl- (9CI) (CA INDEX NAME)

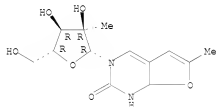
Absolute stereochemistry.



RN 622380-89-6 CAPLUS

CN Furo[2,3-d]pyrimidin-2(1H)-one, 3,7a-dihydro-6-methyl-3-(2-C-methyl-beta-D-ribofuranosyl)- (CA INDEX NAME)

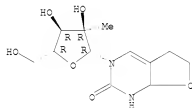
Absolute stereochemistry.



RN 622380-90-9 CAPLUS

CN Furo[2,3-d]pyrimidin-2(1H)-one, 3,5,6,7a-tetrahydro-3-(2-C-methyl-beta-D-ribofuranosyl)- (CA INDEX NAME)

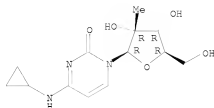
Absolute stereochemistry.



RN 622381-09-3 CAPLUS

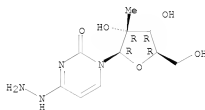
CN Cytidine, N-cyclopropyl-2'-C-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



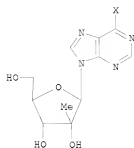
RN 622381-10-6 CAPLUS
 CN Uridine, 2'-C-methyl-, 4-hydrazone (9CI) (CA INDEX NAME)

Absolute stereochemistry.

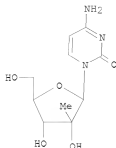


L6 ANSWER 55 OF 58 CAPLUS COPYRIGHT 2008 ACS on STM
 AN 2003:591195 CAPLUS
 DN 139:133789
 TI Preparation of sugar modified nucleosides as antiviral agents
 IN Hong, Zhi; An, Haoyun; Ding, Yili; Girardet, Jean-luc; Zhong, Weidong
 PA Ribapharm Inc., USA
 SO PCT Int. Appl., 33 pp.
 CODEN: PIXXD2
 DI Patent
 LA English
 FAN.CWT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003062255	A2	20030731	WO 2002-US231556	20021002
	WO 2003062255	A3	20060908		
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BE, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, NO, NZ, OH, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW:				
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EP	1572705	A2	20050914	EP 2002-776103	20021002
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US	20070032448	A1	20070208	US 2006-535742	20060925
PRAI	US 2002-350296P	P	20020117		
	US 2002-391800P	P	20020626		
	WO 2002-US31556	W	20021002		
OS	MARFAT 139:133789				
GI					



I



II

AB Various 2'-modified nucleoside analogs I and II wherein X is NH₂, NHMe, NMe₂, OMe, SMe, and corresponding prodrugs are provided, and particularly contemplated methods of use include use as antiviral agents, and especially as antiviral agents against HCV.

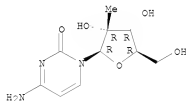
II 20724-73-6 31448-54-1 119410-84-3
565481-07-2 565481-08-3 565481-09-4
565481-10-7 565481-11-8

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(preparation of sugar modified nucleosides as antiviral agents)

RN 20724-73-6 CAPLUS

CN Cytidine, 2'-C-methyl- (CA INDEX NAME)

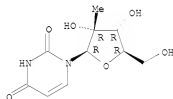
Absolute stereochemistry.



RN 31448-54-1 CAPLUS

CN Uridine, 2'-C-methyl- (CA INDEX NAME)

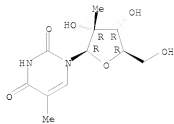
Absolute stereochemistry. Rotation (+).



RN 119410-84-3 CAPLUS

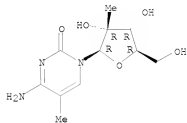
CN Uridine, 3-methyl-2'-C-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



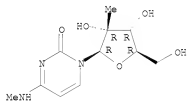
RN 565451-07-2 CAPLUS
CN Cytidine, 5-methyl-2'-C-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



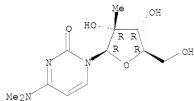
RN 565451-08-3 CAPLUS
CN Cytidine, N-methyl-2'-C-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



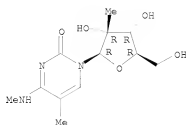
RN 565451-09-4 CAPLUS
CN Cytidine, N,N-dimethyl-2'-C-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



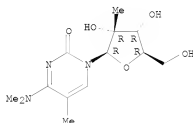
RN 565451-10-7 CAPLUS
CN Cytidine, N,5-dimethyl-2'-C-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 565451-11-8 CAPLUS
 CN Cytidine, N,N,5-trimethyl-2'-C-methyl- (9CI) (CA INDEX NAME)

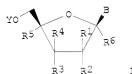
Absolute stereochemistry.



L6 ANSWER 56 OF 58 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2002:555629 CAPLUS
 DN 137:125359
 TI Preparation of nucleoside derivatives as inhibitors of RNA-dependent RNA
 viral polymerase
 IN Carroll, Steven S.; Lafemina, Robert L.; Hall, Dawn L.; Himmelberger, Amy
 L.; Kuo, Lawrence C.; Maccoss, Malcolm; Olsen, David B.; Rutkowski, Carrie
 A.; Tomassini, Joanne E.; An, Haoyun; Bhat, Balkrishen; Bhat, Neelima;
 Cook, Phillip Dany; Eldrup, Anne B.; Guinasso, Charles J.; Fehavc, Marija;
 Prakash, Tharsha P.
 PA Merck & Co., Inc., USA; Isis Pharmaceuticals, Inc.
 SO PCT Int. Appl., 235 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002057425	A2	20020725	WO 2002-US1531	20020118
WO 2002057425	A3	20050421		
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RW:	GH, GM, KE, LS, MW, ME, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
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AU 2002243600	A1	20020730	AU 2002-243600	20020118
AU 2002243600	B2	20060928		
US 20020147160	A1	20021010	US 2002-52318	20020118
US 6777395	B2	20040817		
CN 1498221	A	20040519	CN 2002-806977	20020118
JP 2004532184	T	20041021	JP 2002-558479	20020118
EP 1539188	A2	20050615	EP 2002-709095	20020118
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EP 1707571	A1	20061004	EP 2006-76021	20020118
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ES	2278009	T3	20070801	ES 2002-709299	20020118
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US	20040072788	A1	20040415	US 2003-431657	20030507
ZA	200305078	A	20040521	ZA 2003-5078	20030630
US	20040067901	A1	20040408	US 2003-688691	20031017
US	7125855	B2	20061024		
US	2004011017	A1	20040610	US 2004-250873	20040116
US	7105499	B2	20060912		
US	20050272676	A1	20051208	US 2005-200499	20050809
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US	20060264390	A1	20061123	US 2006-496338	20060731
US	7262224	B2	20070410		
US	20070275912	A1	20071129	US 2006-643464	20061221
JP	2007224045	A	20070906	JP 2007-115345	20070425
FRAI	US 2001-263313P	P	20010122		
	US 2001-282069P	P	20010406		
	US 2001-299320P	P	20010619		
	US 2001-344528P	P	20011025		
	EP 2002-709299	A3	20020118		
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	WO 2002-051331	H	20020118		
	US 2003-431657	B1	20030507		
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	OS	MARFAT 137:125359			
GI					

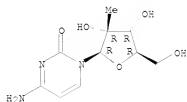


AB The present invention provides the preparation of nucleoside compds. I, wherein R is nucleobase, Y is H, alkylcarbonyl, phosphate; R1 is H, alkenyl, alkynyl, alkyl; R2 and R3 are independently H, OH, halogen, alkyl, alkoxy, alkenyloxy, alkylthio, alkylcarbonyloxy, aryloxy, carbonyl, azido, amino, alkylamino; R4 and R5 together with the carbon atom to which they are attached form a 3- to 6-membered heterocycle; R6 is H, OH, SH, NH2, alkylamino, cycloalkylamino, halogen, alkyl, alkoxy, CF3; R5 and R6 are independently H, hydroxymethyl, Me, fluoromethyl; and certain derivs. thereof which are inhibitors of RNA-dependent RNA viral polymerase. These compds. are inhibitors of RNA-dependent RNA viral replication and are useful for the treatment of RNA-dependent RNA viral infection. They are particularly useful as inhibitors of hepatitis C virus (HCV) NS5B polymerase, as inhibitors of HCV replication, and/or for the treatment of hepatitis C infection. The invention also describes pharmaceutical compns. containing such nucleoside compds. alone or in combination with other agents active against RNA-dependent RNA viral infection, in particular HCV infection. Also disclosed are methods of inhibiting RNA-dependent RNA polymerase, inhibiting RNA-dependent RNA viral replication, and/or treating RNA-dependent RNA viral infection with the nucleoside compds. of the present invention. Thus, 4-amino-1-(2-C-methyl- β -D-ribofuranosyl)-1H-pyrazolo[3,4-d]pyrimidine was prepared as inhibitors of RNA-dependent RNA viral polymerase. Representative compds. tested in the HCV NS5B polymerase assay exhibited IC₅₀'s less than 100 μ M. The compds. of the present invention were also evaluated for their ability to affect the replication of Hepatitis C Virus RNA in cultured hepatoma (HuH-7) cells containing a sub-genomic HCV replicon.

II 20724-73-6P 114262-49-6P 374750-28-4P
444019-82-3P 444020-83-1P 444022-03-1P
RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREF (Preparation); USES (Uses)
(preparation of nucleoside derivs. as inhibitors of RNA-dependent human RNA

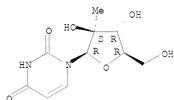
viral polymerase)
 RN 20724-73-6 CAPLUS
 CN Cytidine, 2'-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.



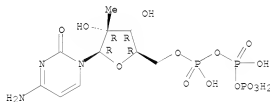
RN 114262-49-6 CAPLUS
 CN 2,4-(1R,3H)-Pyrimidin-2(1H)-one, 1-(2-C-methyl-beta-D-arabinofuranosyl)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



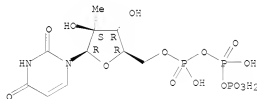
RN 374750-28-4 CAPLUS
 CN Cytidine 5'-(tetrahydrogen triphosphate), 2'-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.



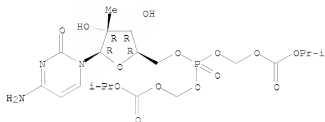
RN 444019-82-3 CAPLUS
 CN 2,4-(1R,3H)-Pyrimidin-2(1H)-one, 1-[5-O-[hydroxy[[hydroxy(phosphonooxy)phosphinyl]oxy]phosphinyl]-2-C-methyl-beta-D-arabinofuranosyl]- (CA INDEX NAME)

Absolute stereochemistry.



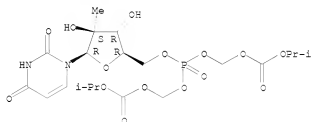
RN 444020-83-1 CAPLUS
 CN 5'-Cytidylic acid, 2'-C-methyl-, bis[[[(1-methylethoxy)carbonyl]oxy]methyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 444022-03-1 CAPLUS
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-C-methyl-5-O-[7-methyl-1-[[[(1-methylethoxy)carbonyl]oxy]methoxy]-1-oxido-5-oxo-2,4,6-trioxo-1-phosphacet-1-yl]-β-D-arabinofuranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

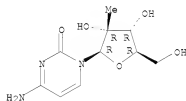


L6 ANSWER 57 OF 58 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2001:886155 CAPLUS
 DN 136:590
 TI Methods and compositions using modified nucleosides for treating
 flaviviruses and pestiviruses
 IN SonnaGossi, Jean-Pierre; Lacolla, Paolo
 PA Novartis Pharmaceuticals Limited, Cayman I.; Università Degli Studi Di
 Cagliari
 SO PCT Int. Appl., 302 pp.
 CODEN: PIMXD2
 DT Patent
 LA English
 FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001092282	A2	20011206	WO 2001-US16687	20010523
WO 2001092282	A3	20020502		
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RW: OH, OM, KE, LS, NM, ME, SD, SL, SE, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BG, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2410579	A1	20011206	CA 2001-2410579	20010523
EP 1294735	A2	20030326	EP 2001-952131	20010523
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US 6812219	B2	20041102		
CN 1468249	A	20040114	CN 2001-813182	20010523
BR 2001011196	A	20040406	BR 2001-11196	20010523
JP 2004510698	T	20040408	JP 2002-500895	20010523
NZ 536570	A	20060831	NZ 2001-536570	20010523
EP 1736478	A1	20061227	EP 2006-75198	20010523
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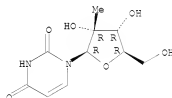
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CN	101099745	A	20080109	CN	2007-10089609	20010523
NZ	547254	A	20080131	NZ	2001-547204	20010523
NO	2002003600	A	20030117	NO	2002-5600	20021121
MX	2002PA11691	A	20040517	MX	2002-PA11691	20021126
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ZA	2002010112	A	20040623	ZA	2002-10112	20021212
US	20040063622	A1	20040401	US	2003-602693	20030620
US	7148206	B2	20061212			
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US	7105493	B2	20060912			
US	20060166865	A1	20060727	US	2003-602135	20030620
US	7163929	B2	20070116			
US	20070037773	A1	20070215	US	2006-527124	20060925
AU	2007202602	A1	20070719	AU	2007-202602	20070607
KR	2008021797	A	20080307	KR	2008-701618	20080121
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	US 2001-263276P	F	20010411			
	CN 2001-813182	A3	20010523			
	EP 2001-952131	A3	20010523			
	US 2001-863916	A3	20010523			
	WO 2001-US16687	W	20010523			
OS	KR 2002-715794	A3	20021122			
	US 2003-602135	A1	20030620			
AB	MARFAT 136:590					
IT	A method and composition are provided for treating a host infected with flavivirus or pestivirus, comprising administering an effective amount of a 1', 2' or 3'-modified nucleoside or a pharmaceutically acceptable salt or prodrug thereof.					
	20724-73-6 31448-54-1 119410-84-3					
	RI: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (nucleoside derivs. for treating flaviviruses and pestiviruses)					
RN	20724-73-6	CAPLUS				
CN	Cytidine, 2'-C-methyl- (CA INDEX NAME)					

Absolute stereochemistry.



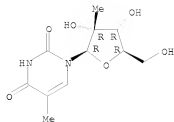
RN 31448-54-1 CAPLUS
 CN Uridine, 2'-C-methyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



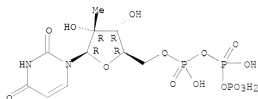
RN 119410-84-3 CAPLUS
 CN Uridine, 5-methyl-2'-C-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



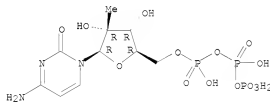
IT 125911-76-4 374750-28-4
 RL: BSU (Biological study, unclassified); PKT (Pharmacokinetics); BIOL
 (Biological study)
 (nucleoside derivs. for treating flaviviruses and
 pestiviruses)
 RN 125911-76-4 CAPLUS
 CN Uridine 5'-(tetrahydrogen triphosphate), 2'-C-methyl- (9CI) (CA INDEX
 NAME)

Absolute stereochemistry.



RN 374750-28-4 CAPLUS
 CN Cytidine 5'-(tetrahydrogen triphosphate), 2'-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.

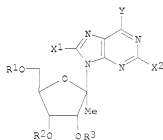


L6 ANSWER 58 OF 58 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2001:868467 CAPLUS
 DN 136:6296
 TI Preparation of antiviral nucleosides and methods for treating
 hepatitis C virus
 IN Sennadoss, Jean-Pierre; Lacolla, Paulo
 PA Novartis Pharmaceuticals Limited, Cayman I.; Universita degli Studi di
 Cagliari;
 SO PCT Int. Appl., 296 pp.
 CODEN: PIMXKD2
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001090121	A2	20011129	WO 2001-US16671	20010523
WO 2001090121	A3	20020502		

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US	7157441	B2	20070102
AU	2006203121	A1	20060810
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KR	2007036806	A	20070403
NO	2007003151	A	20030106
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IN	2007DN09896	A	20080208
KR	2008030670	A	20080404
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AU	2001-74906	A3	20010523
EP	2001-941564	A3	20010523
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US	2001-864078	A1	20010523
WO	2001-US16671	W	20010523
KR	2002-715790	A3	20021122
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IN	2002-DW1184	A3	20021202
OS	MARFAT 136:6296		
GI			



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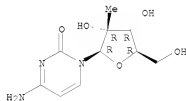
AB A method and composition for treating a host infected with hepatitis
 C comprising administering an effective hepatitis
 C treatment amount of a described 1'-, 2'- or 3'-modified

nucleosides I, wherein: R1-R3 and R are independently H, phosphate (including mono, di- or triphosphate and a stabilized phosphate prodrug); acyl; alkyl; sulfonate ester including alkyl or arylalkyl sulfonate including methanesulfonyl and benzyl, wherein the Ph group is optionally substituted with one or more substituents as described in the definition of aryl given herein; a lipid, including a phospholipid; an amino acid; a carbohydrate; a peptide; a cholesterol; or other pharmaceutically acceptable leaving group which when administered in vivo is capable of providing a compound wherein R1-R3 are independently H or phosphate; Y is hydrogen, bromo, chloro, fluoro, iodo, OR4, NR4R5 or SR4; X1 and X2 are independently selected from the group consisting of H, straight chained, branched or cyclic alkyl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, chloro, bromo, fluoro, iodo, OR4, NR4R5 or SR4; and R4 and R5 are independently hydrogen, acyl, alkyl or a pharmaceutically acceptable salt or prodrug thereof, is provided. Thus, I (R1-R3 = X1 = X2 = H, Y = NH2) was prepared and tested in Cynomolgus monkeys as antiviral agent. Oral bioavailability in monkeys, bone human bone marrow toxicity (IC50 > 10 μ M), and mitochondrial toxicity, were reported.

II 20724-73-6P 31448-54-1P 119410-84-3P
125911-76-4P 374750-28-4P
RI: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); IMF (Industrial manufacture); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); FREF (Preparation); USES (Uses)
(preparation of antiviral nucleosides and methods for treating hepatitis C virus)

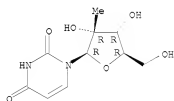
RN 20724-73-6 CAPLUS
CN Cytidine, 2'-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.



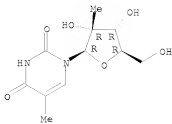
RN 31448-54-1 CAPLUS
CN Uridine, 2'-C-methyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



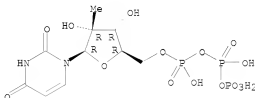
RN 119410-84-3 CAPLUS
CN Uridine, 3-methyl-2'-C-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



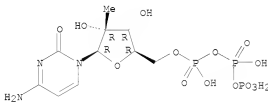
RN 125911-76-4 CAPLUS
 CN Uridine 5'-(tetrahydrogen triphosphate), 2'-C-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 374750-28-4 CAPLUS
 CN Cytidine 5'-(tetrahydrogen triphosphate), 2'-C-methyl- (CA INDEX NAME)

Absolute stereochemistry.



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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)			
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	ENTRY	SESSION	
CA SUBSCRIBER PRICE	-15.20	-15.20	

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 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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STRUCTURE FILE UPDATES: 6 JUN 2008 HIGHEST RN 1026208-38-7
 DICTIONARY FILE UPDATES: 6 JUN 2008 HIGHEST RN 1026208-38-7

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<http://www.cas.org/support/stngen/stdnec/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10609298b.str

L7 STRUCTURE UPLOADED

=> d l7

L7 HAS NO ANSWERS

L7 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> s l7

SAMPLE SEARCH INITIATED 18:14:14 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 2232 TO ITERATE

89.6% PROCESSED 2000 ITERATIONS 4 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 41806 TO 47474
PROJECTED ANSWERS: 4 TO 215

L8 4 SEA SSS SAM L7

=> s l7 full

FULL SEARCH INITIATED 18:14:19 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 44523 TO ITERATE

100.0% PROCESSED 44523 ITERATIONS 171 ANSWERS
SEARCH TIME: 00.00.01

L9 171 SEA SSS FUL L7

=> file caplus		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	178.36	489.76
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-15.20

FILE 'CAPLUS' ENTERED AT 18:14:23 ON 08 JUN 2008
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FILE COVERS 1907 - 8 Jun 2008 VOL 148 ISS 24

FILE LAST UPDATED: 6 Jun 2008 (20080606/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
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<http://www.cas.org/legal/infopolicy.html>

=> s 19

L10 74 L9

=> s 110 and (flavivirus or pestivirus or flaviviridae or hcv or hepatitis c)

1747 FLAVIVIRUS
864 FLAVIVIRUSES
2025 FLAVIVIRUS
(FLAVIVIRUS OR FLAVIVIRUSES)

501 PESTIVIRUS
266 PESTIVIRUSES
597 PESTIVIRUS
(PESTIVIRUS OR PESTIVIRUSES)

645 FLAVIVIRIDAE
14183 HCV
24 HCVS
14187 HCV
(HCV OR HCVS)

67218 HEPATITIS
1 HEPATITISES
67218 HEPATITIS
(HEPATITIS OR HEPATITISES)

3835463 C
20967 HEPATITIS C
(HEPATITIS(H)C)

L11 37 L10 AND (FLAVIVIRUS OR PESTIVIRUS OR FLAVIVIRIDAE OR HCV OR HEPATITIS C)

=> d bib abs hitstr 1-37

L11 ANSWER 1 OF 37 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2008:562068 CAPLUS

DN 148:509492

TI The hepatitis C virus replicon presents a higher barrier to resistance to nucleoside analogs than to nonnucleoside polymerase or protease inhibitors

AU McCown, Matthew F.; Rajyaguru, Sonal; Le Pogam, Sophie; Ali, Samir; Jiang, Wen-Rong; Kang, Hyunsoo; Symons, Julian; Cammack, Nick; Najera, Isabel
CS Department of HCV Biology, Virology Disease Biology Area, Roche Palo Alto LLC, Palo Alto, CA, 94304, USA

SO Antimicrobial Agents and Chemotherapy (2008), 52(5), 1604-1612
CODEN: ANACQJ; ISSN: 0866-4804

PB American Society for Microbiology

DT Journal

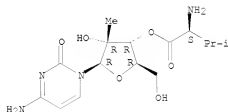
LA English

AB Specific inhibitors of hepatitis C virus (HCV) replication that target the NS3/4A protease (e.g., VX-950) or the NS5B polymerase (e.g., R1479/R1626, PSI-6130/R7128, NM107/NM283, and HCV-796) have advanced into clin. development. Treatment of patients with VX-950 or HCV-796 rapidly selected for drug-resistant variants after a 14-day monotherapy treatment period. However, no viral resistance was identified after monotherapy with R1626 (prodrug of R1479) or NM283 (prodrug of NM107) after 14 days of monotherapy. Based upon the rapid selection of resistance to the protease and nonnucleoside inhibitors during clin. trials and the lack of selection of resistance to the nucleoside inhibitors, we used the replicon system to determine whether nucleoside inhibitors demonstrate a higher genetic barrier to resistance than protease and nonnucleoside inhibitors. Treatment of replicon cells with nucleoside inhibitors at 10 and 15 times the 50% effective concentration resulted in clearance of the replicon, while treatment with a nonnucleoside or protease inhibitor selected resistant colonies. In combination, the presence of a nucleoside inhibitor reduced the frequency of colonies resistant to the other classes of inhibitors. These results indicate that the HCV replicon presents a higher barrier to the selection of resistance to nucleoside inhibitors than to nonnucleoside or protease inhibitors. Furthermore, the combination of a nonnucleoside or protease inhibitor with a nucleoside polymerase inhibitor

could have a clear clin. benefit through the delay of resistance emergence.

IT 640725-71-9, NM283
 RI: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (hepatitis C virus replicon presents a higher barrier to resistance to nucleoside analogs than to nonnucleoside polymerase or protease inhibitors)
 RN 640725-71-9 CAPLUS
 CN L-Valine, 3'-ester with 2'-C-methylcytidine, hydrochloride (1:2) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



● 2 HCL

RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

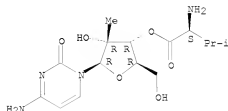
L11 ANSWER 2 OF 37 CAPLUS COPYRIGHT 2008 ACS ON SIN
 AN 2008:416659 CAPLUS
 DN 148:417879
 TI Compositions of immunostimulatory oligonucleotides as Toll-like receptor ligands and antiviral agents for therapeutic administration
 IN Vollmer, Jorg; Jurk, Marion; Uhlmann, Eugen; Debelak, Harald; Bratzler, Robert L.; Vicosi, Alain
 PA Coley Pharmaceutical Group, Inc., USA; Coley Pharmaceutical G.m.b.H.; Coley Pharmaceutical Group, Ltd.
 SO PCT Int. Appl., 89pp.
 CODEN: PIXMD2
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2008039538	A2	20080403	WO 2007-US21030	20070927
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BN, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
FPRI US 2006-847408P	P	20060927		

AB The invention relates to methods and products for the treatment of viral infection using a combination of antiviral agents and Toll-like receptor (TLR) ligands. The TLR ligands comprise immunostimulatory oligonucleotides, preferably containing modifications selected from 8'-exo-rG, 8-bromo-dG, 8-bromo-dA, and isatoribine (Immunosine) with a 3'-5' linkage. The 8'-modified guanine residues enhance immunostimulatory activity, particularly when present at the 5' end of the oligonucleotide. Combination of Ribavirin with an immunostimulatory CpG-containing oligonucleotide results in a decrease of interleukin-10 relative to interferon- α inducing activity. Further, Ribavirin and CpG

oligonucleotide improve survival in a mouse cancer model.
 640281-90-9, Valopicitabine
 RI: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (compns. of immunostimulatory oligonucleotides as Toll-like receptor
 ligands and antiviral agents for therapeutic administration)
 RN 640281-90-9 CAPLUS
 CN L-Valine, 3'-ester with 2'-C-methylcytidine (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



111 ANSWER 3 OF 37 CAPLUS COPYRIGHT 2008 ACS on SIN

AN 2008:352859 CAPLUS

DN 148:394354

TI Compositions and methods for treatment of viral diseases

IN Johansen, Lisa M.; Owens, Christopher M.; Mawhinney, Christina; Chappell,

Todd W.; Brown, Alexander T.; Frank, Michael G.; Altmeyer, Ralf

FA Combinatorm (Singapore) Pte. Ltd., Singapore

SO FOT Int. Appl., 237pp.

CODEN: PIKXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2008033466	A2	20080320	WO 2007-0519932	20070913
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RM:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GN, GQ, GW, GL, HE, HM, IL, IN, IS, JP, KE, KG, KH, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			

PRAI US 2006-844463P P 20060914

US 2006-874061P P 20061211

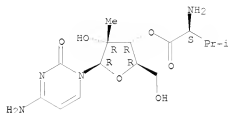
AB Based on the results of the authors screen identifying compds. and combinations of compds. having antiviral activity, the present invention features compns., methods, and kits useful in the treatment of viral diseases. In certain embodiments, the viral disease is caused by a single stranded RNA virus, a flaviviridae virus, or a hepatic virus. In particular embodiments, the viral disease is viral hepatitis (e.g., hepatitis A, hepatitis B, hepatitis C, hepatitis D, hepatitis E). Also featured are screening methods for identification of novel compds. that may be used to treat a viral disease.

II 640281-90-9, Valopicitabine 640725-71-9, NM-283
 1015079-99-8 1015080-00-8 1015080-23-5
 1015080-28-0 1015080-31-5 1015080-38-2
 1015080-56-4 1015080-58-6 1015080-59-7
 RI: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (compns. and methods for treatment of viral diseases)

RN 640281-90-9 CAPLUS

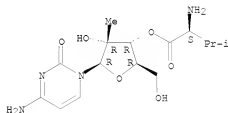
CN L-Valine, 3'-ester with 2'-C-methylcytidine (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 640725-71-9 CAPLUS
 CN 1-Valine, 3'-ester with 2'-C-methylcytidine, hydrochloride (1:2) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



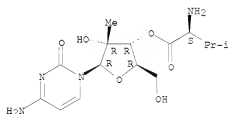
● 2 HCL

RN 1015079-99-8 CAPLUS
 CN 1-Valine, 3'-ester with 2'-C-methylcytidine, hydrochloride (1:2), mixt. with (3R,5aS,6R,8aS,9R,12S,12aR)-octahydro-3,6,9-trimethyl-3,12-epoxy-12H-pyrano[4,3-j]-1,2-benzodioxepin-10(3H)-one (CA INDEX NAME)

CM 1

CRN 640725-71-9
 CMF C15 H24 N4 O6 . 2 Cl H

Absolute stereochemistry. Rotation (+).

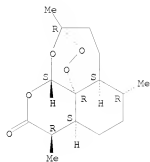


● 2 HCL

CM 2

CRN 63968-64-9
 CMF C15 H22 O5

Absolute stereochemistry.



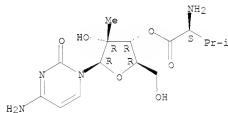
RN 1015080-00-3 CAPLUS
 CN L-Valine, 3'-ester with 2'-C-methylcytidine, hydrochloride (1:2), mixt.
 with 1,8,9-trihydroxy-3-methoxy-6H-benzofuro[3,2-c][1]benzopyran-6-one
 (CA INDEX NAME)

CM 1

CRN 640725-71-9

CMF C15 H24 N4 O6 . 2 Cl H

Absolute stereochemistry. Rotation (+).

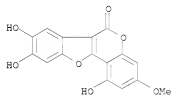


● 2 HCl

CM 2

CRN 524-12-9

CMF C16 H10 O7



RN 1015080-23-5 CAPLUS
 CN L-Valine, 3'-ester with 2'-C-methylcytidine, hydrochloride (1:2), mixt.
 with (6E)-N-[(4-hydroxy-3-methoxyphenyl)methyl]-8-methyl-6-nonenamide (CA
 INDEX NAME)

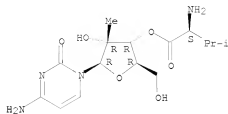
CM 1

CRN 640725-71-9

CMF C15 H24 N4 O6 . 2 Cl H

Absolute stereochemistry. Rotation (+).

10/609,298



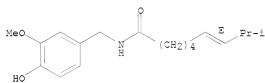
● 2 HCL

CM 2

CRN 404-86-4

CMF C18 H27 N O3

Double bond geometry as shown.



RN 1015080-28-0 CAPLUS

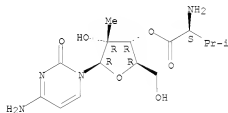
CN L-Valine, 3'-ester with 2'-C-methylcytidine, hydrochloride (1:2), mixt. with 3-[(3,5-dibromo-4-hydroxyphenyl)methylene]-1,3-dihydro-5-iodo-2H-indol-2-one (CA INDEX NAME)

CM 1

CRN 640725-71-9

CMF C15 H24 N4 O6 . 2 Cl H

Absolute stereochemistry. Rotation (+).



● 2 HCL

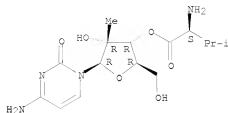
CM 2

CRN 220904-83-6

CMF C15 H8 Br2 I N O2

McIntosh

10/609,298



● 2 HCL

CM 2

CRN 57669-32-6

CMF C9 H8 O3



RN 1015080-56-4 CAPLUS

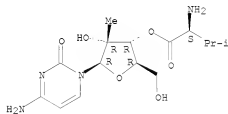
CN L-Valine, 3'-ester with 2'-C-methylcytidine, hydrochloride (1:2), mixt.
with 1-(4-fluorophenyl)-4-[4-hydroxy-4-(3-(trifluoromethyl)phenyl)-1-piperidinyl]-1-butanone (CA INDEX NAME)

CM 1

CRN 640725-71-9

CMF C19 H24 N4 O6 . 2 Cl H

Absolute stereochemistry. Rotation (+).



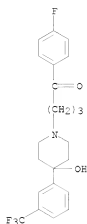
● 2 HCL

CM 2

CRN 749-13-3

CMF C22 H23 F4 N O2

10/609,298



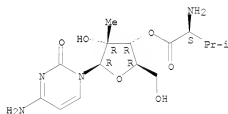
RN 1015080-58-6 CAPLUS
CN L-Valine, 3'-ester with 2'-C-methylcytidine, hydrochloride (1:2), mixt.
with 3-(2-phenyldiazanyl)-2,6-pyridinediamine (CA INDEX NAME)

CM 1

CRN 640725-71-9

CMF C15 H24 N4 O6 . 2 Cl H

Absolute stereochemistry. Rotation (+).

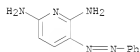


● 2 HCl

CM 2

CRN 94-78-0

CMF C11 H11 N5



RN 1015080-59-7 CAPLUS
CN L-Valine, 3'-ester with 2'-C-methylcytidine, hydrochloride (1:2), mixt.
with α,α,α -trifluorothymidine (CA INDEX NAME)

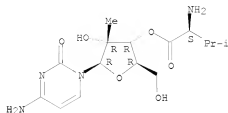
CM 1

CRN 640725-71-9

CMF C15 H24 N4 O6 . 2 Cl H

Absolute stereochemistry. Rotation (+).

McIntosh



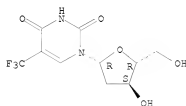
● 2 HCL

CM 2

CRN 70-00-3

CMF C10 H11 F3 N2 O5

Absolute stereochemistry.



L11 ANSWER 4 OF 37 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2008:90893 CAPLUS

DN 148:192198

TI Preparation of peptidomimetics as modulators of pharmacokinetic properties of therapeutics by inhibiting cytochrome P450 monooxygenase

IN Desai, Manoj C.; Hong, Allen Yu; Liu, Hongtao; Xu, Lianhong; Vivian, Randall W.

PA Gilead Sciences, Inc., USA

SO PCT Int. Appl., 346pp.

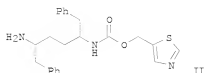
CODEN: PIKXD2

DT Patent

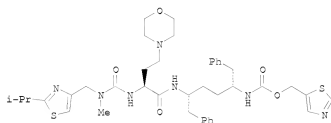
LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2008010921	A2	20080124	WO 2007-US15604	20070706
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, MA, MD, ME, MG, MK, MN, MU, MV, MY, NZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BT, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AE, BY, KG, KZ, MD, RU, TJ, TM			
US 20080108617	A1	20080508	US 2007-825605	20070706
PRAI US 2006-819315P	P	20060707		
US 2006-832371P	P	20060721		
US 2007-903228P	P	20070223		
OS MARPAT 148:192198				
GI				



II



III

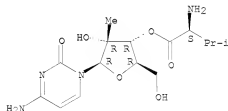
AB The invention is related to the preparation of R₅Y₂L[CONR₁(CR₂R₂)m]nL₁NR₃CH[L₃A (L₄Ar)p]CHR₄L₂CH[L₃A(L₄Ar)p]NR₅CO₂2XR₉ [I; L₁ = C(R₆)₂, CO, SO₂, NHC=O and derivs., OCO; R₄, R₆ = independently H, heteroalkyl, (un)substituted alkyl; L₂ = a covalent bond, C(R₆)₂, CO; each L₃ = independently a covalent bond, (un)substituted alkylene; each L₄ = L₃, O, CH₂O, NH; each A = H, (un)substituted alkyl, aryl, heterocyclyl with the proviso that when A = H, p = 0; Z₁, Z₂ = independently O, NH and derivs.; Y, X = independently heterocyclyl, heterocyclylalkyl; each Ar = independently (un)substituted (hetero)aryl; R₁, R₃, R₅ = independently H, (un)substituted aryl/alkyl; each R₂ = independently H, (un)substituted aryl/hetero/hydroxy/amino/alkyl, alkylene-CO₂H, alkylene-CO-alkyl, etc.; R₈, R₉ are each one or more H's or substituents selected from Cl, CN, (un)substituted alkyl, aryl, heterocyclyl; m = 1-2; n = 0-1; each p = independently 0-1], their pharmaceutically acceptable salts, solvates and esters, and compns. containing them which improve the pharmacokinetics of a co-administered drug which is metabolized by cytochrome P 450 monooxygenase. Thus, a multi-step synthesis using 2-isopropyl-4-[(methylanilino)methyl]-1,3-thiazole, (2S)-2-amino-4-[(tert-butoxycarbonyl)amino]butanoic acid Me ester, amine II and (BrCH₂CH₂)₂O was given for III. III inhibited CYP450 3A₄ (IC₅₀ = 80-150 nM), CYP450 2C₉ (IC₅₀ = 1,000-10,000 nM) and protease (EC₅₀ > 20,000 nM in an anti HIV-1 cell culture assay). I alone or in combination with one or more addnl. therapeutic agents which are metabolized by cytochrome P 450 monooxygenase are useful for treating a viral infection, e.g. HIV (no data).

IT 640281-90-9, Valopicitabine 640725-71-9, NM-283
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (compds. as modulators of pharmacokinetic properties of therapeutic agents)

RN 640281-90-9 CAPLUS

CN L-Valine, 3'-ester with 2'-C-methylcytidine (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

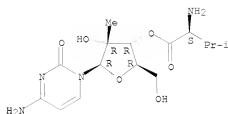


RN 640725-71-9 CAPLUS

CN L-Valine, 3'-ester with 2'-C-methylcytidine, hydrochloride (1:2) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

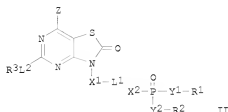
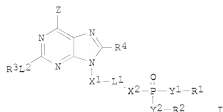
McIntosh



● 2 HCL

L11 ANSWER 5 OF 37 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2008:40914 CAPLUS
 DN 148:168504
 TI Preparation of purine and thiadiazapurine phosphonate derivatives as
 modulators of toll-like receptor 7
 IN Chong, Lee S.; Desai, Manoj C.; Gallagher, Brian; Graupe, Michael;
 Halcomb, Randall L.; Yang, Hong; Zhang, Jennifer R.
 PA Gilead Sciences, Inc., USA
 SO PCT Int. Appl., 273pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.		KIND	DATE	APPLICATION NO.	DATE
PI	WO 2008005555	A1	20080110	WO 2007-US15615	20070706
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
	RW:				
	AE, BE, BG, CH, CY, CZ, DE, DK, EE, EG, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BT, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	US 20080008682	A1	20080110	US 2007-825377	20070706
FRAI	US 2006-819490P	P	20060707		
	US 2006-832851P	P	20060724		
OS	WARFAT 148:168504				
GI					



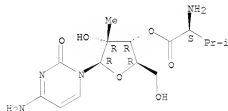
AB The present application provides for a compound I [Z = OH, NH₂; X₁ = (un)substituted alkylene, alkenylene, alkynylene, carbocyclylene, heterocyclylene; L₁ = bond, (un)substituted arylene, heterocyclylene, carbocyclylene, S, S(=O), SO₂, NR₅, O; X₂ = bond, (un)substituted alkylene; L₂ = NR₅, NR₅C(=O), O, S, S(=O), SO₂, bond; R₃ = H, (un)substituted alkyl, heteroalkyl, alkenyl, aryl, arylalkyl, heterocyclyl, heterocyclylalkyl; Y₁, Y₂ = bond, O, NR₅, Y₁R₁, Y₂R₂ = ON:CR₆R₇; R₁, R₂ = H, (un)substituted alkyl, carbocyclyl, heterocyclyl, alkenyl, alkynyl, arylalkyl, etc.; R₄ = H, halogen, OH, O-alkyl, O-alkylene-OCO₂R₅, OCO₂R₅, SH, NR₅; R₅, R₆, R₇ = H, (un)substituted alkyl, carbocyclyl, heterocyclyl, alkenyl, alkynyl, arylalkyl, heterocyclylalkyl, etc.] or II or a pharmaceutically acceptable salt, solvate, and/or ester thereof, compns. containing such compds., therapeutic methods that include the administration of such compds., and therapeutic methods that include the administration of such compds. with at least one addnl. active agent.

Thus, [(3-((6-amino-8-hydroxy-2-(2-methoxyethoxy)-9H-purin-9-yl)methyl)phenyl)methyl](methyl)phosphinic acid [I; Z = NH₂, R₄ = OH, L₂ = O, R₃ = CH₂CH₂OMe, X₁ = X₂ = CH₂, L₁ = 1,3-phenylene, Y₁R₁ = Me, Y₂R₂ = OH] was prepared from 6-chloroadenine via N-alkylation with 3-(BrCH₂)C₆H₄CO₂Me, alkoxylation with MeOCH₂CH₂OH, reesterification with MeI, bromination with Br₂, Dibal-H reduction, methanolysis with NaOMe/MeOH, acid hydrolysis, bromination with PBr₃, phosphorylation with MeP(OEt)₂ and acid hydrolysis under microwave irradiation. The toll-like receptor 7 modulating activity of I and II were investigated (no data).

IT 640281-90-9, Valopicitabine 640725-71-9, NM-283
 RI: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (compds. as modulators of Toll-like receptor 7 useful in combination therapy and prevention of TLR7 activation-related diseases)

RN 640281-90-9 CAPLUS
 CN L-Valine, 3'-ester with 2'-C-methylcytidine (CA INDEX NAME)

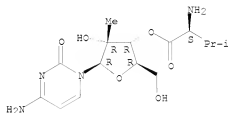
Absolute stereochemistry. Rotation (+).



RN 640725-71-9 CAPLUS

CN L-Valine, 3'-ester with 2'-C-methylcytidine, hydrochloride (1:2) (CA
INDEX NAME)

Absolute stereochemistry. Rotation (+).



● 2 HCl

L11 ANSWER 6 OF 37 CAPLUS COPYRIGHT 2008 ACS on STM

AN 2007:1332915 CAPLUS

DN 148:11439

TI 2'-C-Methyl-Ribofuranosyl Cytidine Prodrugs, Pharmaceutical Compositions
and Uses Thereof

IN Gallop, Mark A.

PA USA

SO U.S. Pat. Appl. Publ., 59pp.

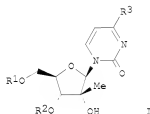
CODEN: USMXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20070270374	A1	20071122	US 2007-752214	20070522
PRAI	US 2006-808360P	P	20060522		
OS	NAEPAT 148:11439				
GI					

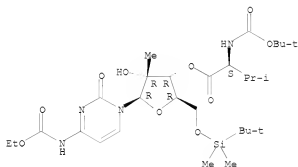


AB The present disclosure provides the preparation of 2'-C-methyl-ribofuranosyl cytidine prodrugs I, wherein R1 and R2 are independently H, acyl, acyloxymethyl, carbonyl, oxycarbonyl, substituted aminocarbonyl; R3 is substituted imine, substituted amine, and pharmaceutical compns. thereof to treat viral diseases such as hepatitis C. Thus, β -(4-allyloxycarbonylamino-2-oxo-1H-pyrimidin-1-yl)-2-C-methylribofuranose was prepared (no data) and tested in vitro in combination with antiviral agents to treat viral diseases, wherein the second antiviral agent is selected from an interferon, ribavirin, interleukin, an NS3 protease inhibitor, cysteine protease inhibitor, thiazolidine derivative, thiazolidine, benzamide, phenanthrenequinone, a helicase inhibitor, a polymerase inhibitor, a nucleotide analog, gliotoxin, cerulenin, antisense phosphorothioate oligodeoxynucleotides, inhibitor of IRES-dependent translation, and a ribozyme. In vitro compound transport assays with CNT1, CNT2, CNT3, ENT1 and ENT2 expressing cells, are claimed.

IT 957687-30-8P 957687-34-2P 957687-53-5P
957687-55-7P 957687-58-0P 957687-62-6P
957687-64-8P 957687-83-1P

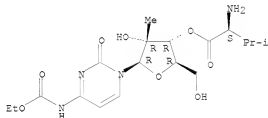
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses);
 (2'-C-methyl-ribofuranosyl cytidine prodrugs, pharmaceutical compns. and uses thereof)
 RN 957687-30-8 CAPLUS
 CN L-Valine, N-[(1,1-dimethylethoxy)carbonyl]-, 3'-ester with 5'-O-[(1,1-dimethylethyl)dimethylsilyl]-N-(ethoxycarbonyl)-2'-C-methylcytidine (CA INDEX NAME)

Absolute stereochemistry.



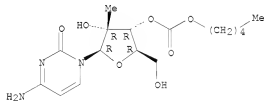
RN 957687-34-2 CAPLUS
 CN L-Valine, 3'-ester with N-(ethoxycarbonyl)-2'-C-methylcytidine (CA INDEX NAME)

Absolute stereochemistry.



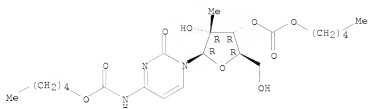
RN 957687-53-5 CAPLUS
 CN Cytidine, 2'-C-methyl-, 3'-(pentyl carbonate) (CA INDEX NAME)

Absolute stereochemistry.



RN 957687-55-7 CAPLUS
 CN Cytidine, 2'-C-methyl-N-[(pentyloxy)carbonyl]-, 3'-(pentyl carbonate) (CA INDEX NAME)

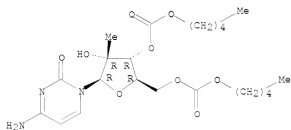
Absolute stereochemistry.



RN 957687-58-0 CAPLUS

CN Cytidine, 2'-C-methyl-, 3',5'-bis(pentyl carbonate) (CA INDEX NAME)

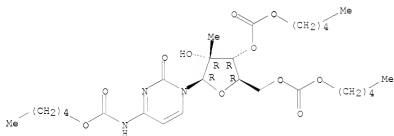
Absolute stereochemistry.



RN 957687-62-6 CAPLUS

CN Cytidine, 2'-C-methyl-N-[(pentyloxy)carbonyl]-, 3',5'-bis(pentyl carbonate) (CA INDEX NAME)

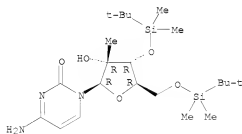
Absolute stereochemistry.



RN 957687-64-8 CAPLUS

CN Cytidine, 3',5'-bis-O-[(1,1-dimethylethyl)dimethylsilyl]-2'-C-methyl- (CA INDEX NAME)

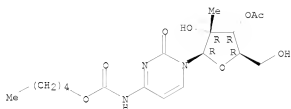
Absolute stereochemistry.



RN 957687-83-1 CAPLUS

CN Cytidine, 2'-C-methyl-N-[(pentyloxy)carbonyl]-, 3'-acetate (CA INDEX NAME)

Absolute stereochemistry.



L11 ANSWER 7 OF 37 CAPLUS COPYRIGHT 2008 ACS on SIN

AN 2007:1164795 CAPLUS

DN 147:534049

TI 2'-C-methyl branched pyrimidine ribonucleoside analogues: potent inhibitors of RNA virus replication

AU Benzarria, Samira; Bardiot, Dorothee; Bouisset, Tony; Counor, Clement;

Rabeson, Celine; Pierre, Claire; Storer, Richard; Loi, Anna Giulia; Cadeddu, Alessandra; Mira, Massimo; Musiu, Chiara; Liuzzi, Michel; Loddo, Roberto; Bergelson, Svetlana; Bichko, Vadim; Bridges, Edward;

Cretton-Scott, Erika; Mao, John; Sommadossi, Jean-Pierre; Seifer, Maria;

Stranding, David; Tausek, Michele; Gosselin, Gilles; La Colla, Paolo

CS Laboratoire Cooperatif Idenix-CNRS-Universite Montpellier II, Montpellier, Fr.

SO Antiviral Chemistry & Chemotherapy (2007), 18(4), 225-242

CODEN: ACCHEH; ISSN: 0956-3202

PE International Medical Press, Ltd.

DI Journal

LA English

OS CASREACT 147:534049

AB RNA viruses are the agents of numerous wide-spread and often severe diseases. Their unique RNA-dependent RNA polymerase (RDRP) is essential for replication and, thus, constitutes a valid target for the development of selective chemotherapeutic agents. In this regard, the authors have investigated sugar-modified ribonucleoside analogs as potential inhibitors of the RDRP. Title compds. retain 'natural' pyrimidine bases, but possess a β -Me substituent at the 2'-position of the D- or L-ribose moiety. Evaluation against a broad range of RNA viruses, either single-stranded pos. (ssRNA+), single-stranded neg. (ssRNA-) or double-stranded (dsRNA), revealed potent activities for D-2'-C-methyl-cytidine and -uridine against ssRNA+, and dsRNA viruses. None of the L-enantiomers were active. Moreover, the 5'-triphosphates of the active D-enantiomers were found to inhibit the bovine virus diarrhoea virus polymerase. Thus, the 2'-Me branching of natural pyrimidine ribonucleosides transforms physiol. mols. into potent, broad-spectrum antiviral agents that merit further development.

II 23643-36-9P 957535-48-7P 957535-51-2P

957535-53-4P

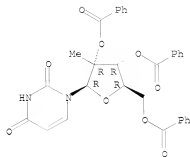
RI: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(pyrimidine ribonucleoside analogs as potent inhibitors of RNA virus replication)

RN 23643-36-9 CAPLUS

CN 2,4-(1R,3H)-Pyrimidinedione, 1-(2,3,5-tri-O-benzoyl-2-C-methyl- β -D-ribofuranosyl)- (9CI) (CA INDEX NAME)

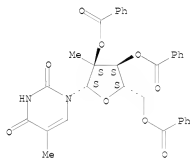
Absolute stereochemistry.



RN 957535-48-7 CAPLUS

CN 2,4-(1R,3H)-Pyrimidin-5-yl-1-(2,3,5-tri-O-benzoyl-2-C-methyl-beta-L-ribofuranosyl)- (CA INDEX NAME)

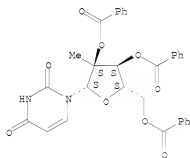
Absolute stereochemistry. Rotation (+).



RN 957535-51-2 CAPLUS

CN 2,4-(1R,3H)-Pyrimidin-5-yl-1-(2,3,5-tri-O-benzoyl-2-C-methyl-beta-L-ribofuranosyl)- (CA INDEX NAME)

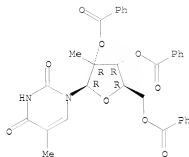
Absolute stereochemistry. Rotation (+).



RN 957535-53-4 CAPLUS

CN Uridine, 5-methyl-2'-C-methyl-, 2',3',5'-tribenzoate (CA INDEX NAME)

Absolute stereochemistry.



RE.CMT 73 THERE ARE 73 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 8 OF 37 CAPLUS COPYRIGHT 2008 ACS ON SIN

AN 2007:1121524 CAPLUS

DN 147:407046

TI Preparation of nucleosides as Hepatitis C virus NS5b
polymerase inhibitors and antiviral agents via regioselective O-acylation
reaction

IN Sarma, Keshab

PA Roche Palo Alto LLC, USA

SO U.S. Pat. Appl. Publ., 15pp.

CODEN: USXXCO

DI Patent

LA English

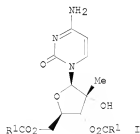
PAN.CMT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 20070232562	A1	20071004	US 2007-732983	20070404
WO 2007113159	A1	20071011	WO 2007-EP52866	20070326
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MP, MQ, MY, NZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, EG, FI, FR, GB, GR, HU, IE, IS, IT, LT, LV, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			

FRAI US 2006-789491P F 20060404

OS CASREACT 147:407046; MARPAT 147:407046

GI



AB Nucleosides I, wherein R1 is Compds. having the formula I wherein R1 is C2-5 (un)-branched alkyl, C2-5 (un)-branched alkenyl, C3-5 cycloalkyl, C2-5 lower halo-alkyl, were prepared as Hepatitis C

virus NS5b polymerase inhibitors. Also disclosed are compns. and methods for inhibiting hepatitis replication, processes for making the compds. and synthetic intermediates used in the process. Thus, nucleoside I.HCl (R1 = C[O]Et) was prepared in 60% yield by regioselective O-acylation of I (R1 = H) with propionyl chloride. Title compds. were tested in vivo as Hepatitis C virus NS5b polymerase inhibitors and antiviral agents (a dose of between 1.0 and 6.0 g per day is administered to the patient). Determination of pharmacokinetic parameters of title nucleosides in rats, is reported.

II 951131-56-9P 951131-58-1P 951131-60-5P

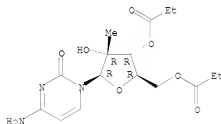
RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Preparation of nucleosides as Hepatitis C virus NS5b polymerase inhibitors and antiviral agents via regioselective O-acylation reaction)

RN 951131-56-9 CAPLUS

CN Cytidine, 2'-O-methyl-, 3',5'-dipropionate, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.

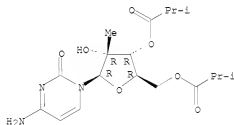


● HCl

RN 951131-58-1 CAPLUS

CN Cytidine, 2'-O-methyl-, 3',5'-bis(2-methylpropanoate), hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.

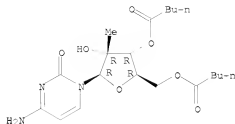


● HCl

RN 951131-60-5 CAPLUS

CN Cytidine, 2'-O-methyl-, 3',5'-dipentanoate, hydrochloride (1:1) (CA INDEX NAME)

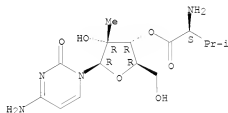
Absolute stereochemistry.



● HCL

II 640281-90-9
 RI: PAC (Pharmacological activity); PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (preparation of nucleosides as Hepatitis C virus NS5b polymerase inhibitors and antiviral agents via regioselective O-acylation reaction)
 RN 640281-90-9 CAPLUS
 CN L-Valine, 3'-ester with 2'-C-methylcytidine (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L11 ANSWER 9 OF 37 CAPLUS COPYRIGHT 2008 ACS on SIN

AN 2007:1112011 CAPLUS

DN 147:514184

TI New therapies for hepatitis C

AU Modi, Apurva A.; Hoofnagle, Jay H.

CS Liver Diseases Branch, National Institute of Diabetes and Digestive and

Kidney Diseases, National Institutes of Health, Bethesda, MD, USA

SO Hepatology (Hoboken, NJ, United States) (2007), 46(3), 615-617

CODEN: HPELD9; ISSN: 0270-9139

PB John Wiley & Sons, Inc.

DT Journal; General Review

LA English

AB A review. The research Forestier et al. (2007) entitled "Antiviral activity of telaprevir (VX-950) and peginterferon alfa-2a in patients with hepatitis C" is reviewed with commentary and refs.

Forestier and her coinvestigators from Saarland University Hospital, the University of Amsterdam, and Vertex Pharmaceuticals describe the preliminary clin. results of a small phase Ib trial of telaprevir. The report provides information on HCV RNA and alanine aminotransferase levels in 8 patients who received telaprevir alone, 8 who received telaprevir with peginterferon, and 4 who served as controls and received peginterferon alone for 2 wk. Telaprevir was then stopped, but the patients were offered a continuation of treatment with a combination of peginterferon and ribavirin until 48 wk and thus were provided the standard of care for chronic hepatitis C, genotype 1. Telaprevir led to a rapid decline in HCV RNA levels within 1-4 days. The combination of peginterferon with telaprevir resulted in a similar early decline in viral levels, but importantly, the combination therapy was associated with an addnl., continuing decline after the first 4 days of treatment.

II 640281-90-9, Valopicitabine

RI: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

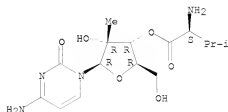
(Biological study); USES (Uses)

(valopicitabine, BILN-2061 showed greater toxicity hence were abandoned from usage by patient with hepatitis C)

RN 640281-90-9 CAPLUS

CN L-Valine, 3'-ester with 2'-C-methylcytidine (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 10 OF 37 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2007:1029651 CAPLUS

DN 147:365486

TI Preparation of 2-(phenylamino)thiazole derivatives as inhibitors of viral
replication for the treatment of hepatitis C infection

IN Zhang, Suoming; Phadke, Avinash; Wang, Xiangzhu; Liu, Cuixian

PA Achillion Pharmaceuticals, Inc., USA

SO FCT Int. Appl., 134pp.

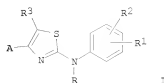
CODEN: PIXXD2

DT Patent

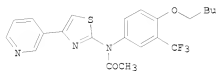
LA English

FAM.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007/103550	A2	20070913	WO 2007-US6023	20070308
WO 2007/103550	A3	20071108		
W:				
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,				
CN, CO, CR, CU, CZ, DE, DK, DM, DO, EC, EE, EG, ES, FI, GB, GD,				
GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN,				
KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN,				
MO, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS,				
RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ,				
UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RM: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,				
IS, IT, LI, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF,				
BJ, CF, CG, CI, CM, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,				
GH, GM, KE, LS, MG, ME, NA, SD, SI, SF, TG, UG, ZM, ZW, AM, AZ,				
BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
US 20070213301	A1	20070913	US 2007-683749	20070308
FRAI US 2006-780609P	P	20060308		
OS MARPAT 147:365486				
GI				



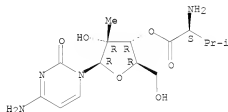
I



II

- AB Title compds. I [wherein A = (un)substituted Ph, benzyl, heteroaryl, etc.; R = CHO, C(O)COOH, C(O)CONH2, etc.; R1 = (un)substituted haloalkyl, haloalkoxy, alkylamino, etc.; R2 (0-2 substituents) = halo, OH, amino, etc.; R3 = H, halo, OH, etc.] And pharmaceutically acceptable salts thereof were prepared as inhibitors of viral replication. For instance, cyclocondensation of 3-bromoacetylpyridine with N-(4-pentoxy-3-trifluoromethylphenyl)thiourea followed by acylation of the resultant anilinothiazole with acetyl chloride gave II. This product showed inhibition of HCV replication with an EC50 of < 1 μ M. Therefore, the invented compds. and their pharmaceutical compns. are useful for the treatment of hepatitis C infection.
- II 640281-90-9, Valopicitabine
 RI: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (co-drug; preparation of (phenylamino)thiazoles as inhibitors of viral replication for treatment of hepatitis C infection)
- RN 640281-90-9 CAPLUS
- CN L-Valine, 3'-ester with 2'-C-methylcytidine (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L11 ANSWER 11 OF 37 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2007:618644 CAPLUS

DN 147:31277

TI Polycyclic phenolic compounds and use in treating viral infections

IN Dugourd, Dominique

PA Migenix Corporation, Can.

SO PCT Int. Appl., 77pp.

CODEN: PIMX52

DT Patent

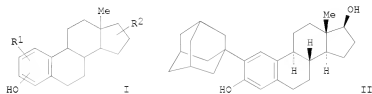
LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2007062528	A1	20070607	WO 2006-CA1965	20061201
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, EE, EG, EH, EI, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,			

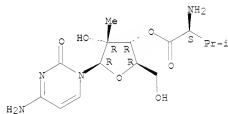
IS, IT, LI, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
 CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG, BW, GH,
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM

US 2007016111 AL 20070712 US 2006-565621 20061130
 PRAI US 2005-742058P P 20051201
 US 2006-565621 A 20061130
 OS MARPAT 147:31277
 GI



AB The present invention provides antiviral polycyclic phenolic compds.
 (EPs) of formula I [R1 = H, alkyl, aryl, cycloalkyl, etc.; R2 = H, OH,
 acyl, oxo, = (substituted) NH, SH, etc.] for use in treating or preventing
 viral infections and associated conditions, such as infections by
 Flaviviridae, Hepadnaviridae, Herpesviridae, Papillomaviridae,
 Retroviridae, Adenoviridae, or respiratory viruses (such as Adenoviridae,
 Orthomyxoviridae, Paramyxoviridae and Coronaviridae). Thus, II was prepared
 from estrone and 1-adamantanol, and inhibited viral release by 69% in
 BVDV-infected MDBK cells.
 IT 640281-90-9, Valopicitabine
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (co-drug; estrone derivs. for treatment of viral infections)
 RN 640281-90-9 CAPLUS
 CN 1-Valine, 3'-ester with 2'-C-methylcytidine (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 12 OF 37 CAPLUS COPYRIGHT 2008 ACS ON STN
 AN 2007:412679 CAPLUS
 DN 146:1395250
 TI Cyclosporin derivatives for the treatment and prevention of
 hepatitis C infection
 IN Houck, David Renwick
 PA Scynexis, Inc., USA
 SO PCT Int. Appl., 63pp.
 CODEN: PIKXD2
 DI Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2007041632	A2	20070412	WO 2006-US38823	20061002
WO 2007041632	A3	20071213		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
 CM, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
 GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP,

	KR,	KZ,	LA,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MN,	NN,	
	MM,	NX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OG,	PG,	PH,	PI,	PT,	RO,	RS,
	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	TJ,	TM,	TN,	TR,	TT,	TZ,
RW:	UA,	UG,	US,	UZ,	VG,	VN,	ZA,	ZM,	ZW							
	AI,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FJ,	GB,	GR,	HU,	IE,
	IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	BJ,
	CF,	CG,	CI,	CM,	CA,	GN,	GD,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,
	KR,	KZ,	LD,	LM,	MZ,	MA,	MD,	LG,	LI,	TZ,	UG,	ZM,	ZW,	AM,	AG,	BY,

KG, KZ, MD, RU, TJ, TM, AP, EA, EP, CA		
2006299426	AL	20070412 AU 2006-299426 20061002
20070173440	AL	20070726 US 2006-542930 20061002
2005-722679P	P	20050930
2006-787549P	P	20060329
2006-US38823	W	20061002

AU 2006299426	Al	20070412	AU 2006-299426	20061002
US 20070173440	Al	20070726	US 2006-542930	20061002

US 2005-722679P	P	20050930
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PRAI	US	2005-722679P	P	20050930
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US 2006-787549P P 20060329

WO 2006-US38823 W 20061002

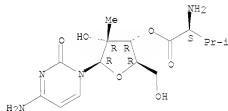
OS MARPAT 146:395250

AB This invention relates to 3-ether or 3-thioether derivs. of cyclosporin or a pharmaceutically acceptable salt or solvate thereof, in combination with a second therapeutic agent for sequential or simultaneous administration in treatment and prevention of hepatitis C viral (HCV) infection. The second therapeutic agent is selected from modulators of NS3-4A protease, modulators of NS5B RNA-dependent RNA polymerase, and immune agents. The agents are: 1,4-diacetyl-3-methoxy-4-(gamma-hydroxymethylleucine)cyclosporin (275 mg) in methanol with 25 weights sodium methoxide in methanol at room temperature yielded 33 mg of 3-methoxy-4-(gamma-hydroxymethylleucine)cyclosporin (Compound 1). The Compound 1 potentially inhibited HCV replication in human liver cells to a greater extent than cyclosporin used as a control. In addition, when considering the level of cytotoxicity, the compound exhibited a wider safety margin (for example, cytotoxicity IC50 vs. antiviral EC50) than cyclosporine. The combination of Compound 1 and interferon- α was synergistic.

IT 640281-90-9, Valganciclovir
RL: PAC (Pharmacological activity); THU (Therapeutic use); BLO (Biological study); USES (Uses)
(cyclosporin deriv. and their combinations for treatment and prevention of hepatitis C infection)

RN 640281-90-9 CAPLUS
CN L-Valine, 3'-ester with 2'-C-methylcytidine (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L11 ANSWER 13 OF 37 CAPLUS COPYRIGHT 2008 ACS on STM

AN 2007:320324 CAPLUS

DN 146:394149

TI Valopicitabine dihydrochloride: a specific polymerase inhibitor of

hepatitis C virus

AU Toniutto, Pierluigi; Fabris, Carlo; Bitetto, Davide; Fornasiere, Ezio;

Rapetti, Rachele; Pirisi, Mario

CS Internal Medicine, Medical Liver Transplantation Unit, DPMSC, Universi

of Udine, Udine, 33100, Italy

SO Current Opinion in Investigational Drugs (Thomson Scientific) (2007),

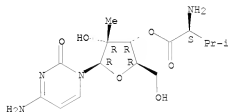
8(2), 150-158

CODEN: COIDAZ; ISSN: 1472-4472

treatment-naïve HCV patients was ongoing, in addition to a phase IIb trial in patients that had previously failed pegylated IFN and ribavirin combination therapy. In Jan. 2006, an international phase III trial in treatment-refractory patients was planned for the first half of the year, with a phase III trial in treatment-naïve individuals planned for the second half of the year.

II 640725-11-9, Valopicitabine dihydrochloride
 RI: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (valopicitabine dihydrochloride and interferon or ribavirin combination therapy was used to treat patient with hepatitis C virus infection)
 RN 640725-11-9 CAPLUS
 CN 1-Valine, 3'-ester with 2'-C-methylcytidine, hydrochloride (1:2) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



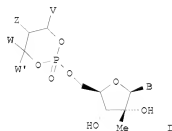
● 2 HCL

RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

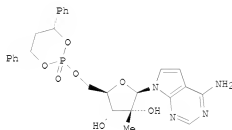
L11 ANSWER 14 OF 37 CAPLUS COPYRIGHT 2008 ACS ON STN
 AN 2007:200728 CAPLUS
 DN 146:274570
 TI Preparation of 2'-C-Me nucleoside 5'-monophosphate and 4'-C-Me nucleoside 5'-monophosphate prodrugs for the treatment of hepatitis C viral infection
 IN Erion, Mark D.; Reddy, K. Raja; Maccoss, Malcolm; Olsen, David B.
 PA Merck & Co., Inc., USA; Metabasis Therapeutics, Inc.
 SO PCT Int. Appl., 268pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2007022073	A2	20070222	WO 2006-US31614	20060814
WO 2007022073	A3	20071115		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA			
AU 2006279720	A1	20070222	AU 2006-279720	20060814
CA 2618713	A1	20070222	CA 2006-2618713	20060814
EP 1915053	A2	20080430	EP 2006-801410	20060814
R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS			
PRAI US 2005-707767P	P	20050812		

US 2006-772649P P 20060213
 WO 2006-US31614 W 20060814
 OS MARPAT 146:274570
 GI



I



II

AB 2'-C-Me nucleoside 5'-monophosphate and 4'-C-Me nucleoside 5'-monophosphate prodrugs I, wherein B can be heterocyclic or heteroaryl rings; V is an optionally substituted monocyclic aryl or heteroaryl ring; W and W' are independently (un)substituted monocyclic aryl or heteroaryl rings, alkyl, aryl, heterocycloaryl or aralkyl groups; Z is halo, cyano, keto, amido, etc. are prepared Further, I can also be prepared such that V and Z are connected via 3-5 atoms to form a cyclic group fused to aryl groups; Z and W connected via 3-5 atoms to form a cyclic group containing one heteroatom; or W and W' connected via an addnl. 2-5 atoms to form a cyclic group optionally containing 0-2 heteroatoms. Thus, II was prepared and tested for its in vitro activation in human liver microsomes by product capture (0.044 nmol/mg/min at activation 250 μ M). I were also tested for their NTP accumulation in hepatocytes; in HCV-infected human liver assays; for tissue distribution following oral administration and the oral bioavailability in normal male rats.

II 926655-64-3P 926655-66-3P 926655-67-6P
 926655-68-7P 926655-69-8P 926655-73-4P
 926655-74-5P 926655-75-6P 926655-76-7P
 926655-77-8P 926655-78-9P 926655-80-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

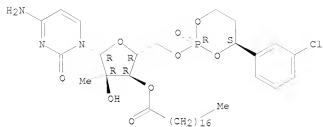
(preparation of 2'-C-Me nucleoside 5'-monophosphate and 4'-C-Me nucleoside 5'-monophosphate prodrugs for the treatment of hepatitis C viral infection)

RN 926655-64-3 CAPLUS

CN Cytidine, 5'-O-[(2R,4S)-4-(3-chlorophenyl)-2-oxido-1,3,2-dioxaphosphorinan-2-yl]-2'-O-methyl-, 3'-octadecanoate (CA INDEX NAME)

Absolute stereochemistry.

10/609,298



RN 926655-66-5 CAPLUS

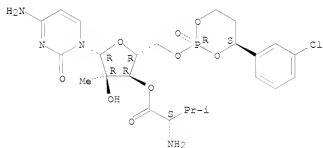
CN 1-Valine, 3'-ester with 5'-O-[(2R,4S)-4-(3-chlorophenyl)-2-oxido-1,3,2-dioxaphosphorinan-2-yl]-2'-C-methylcytidine, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 926655-65-4

CMF C24 H32 Cl N4 O9 P

Absolute stereochemistry.



CM 2

CRN 76-05-1

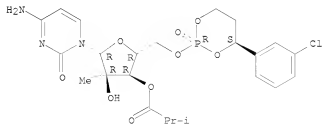
CMF C2 H F3 O2



RN 926655-67-6 CAPLUS

CN Cytidine, 5'-O-[(2R,4S)-4-(3-chlorophenyl)-2-oxido-1,3,2-dioxaphosphorinan-2-yl]-2'-C-methyl-, 3'-(2-methylpropanoate) (CA INDEX NAME)

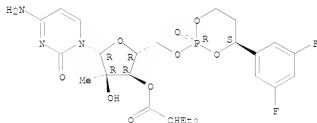
Absolute stereochemistry.



McIntosh

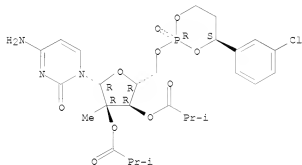
RN 926655-68-7 CAPLUS
 CN Cytidine, 5'-O-[(2R,4S)-4-(3,5-difluorophenyl)-2-oxido-1,3,2-dioxaphosphorinan-2-yl]-2'-C-methyl-, 3'-(2-ethylbutanoate) (CA INDEX NAME)

Absolute stereochemistry.



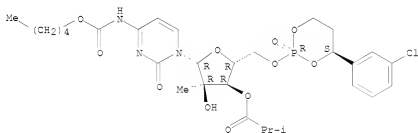
RN 926655-69-8 CAPLUS
 CN Cytidine, 5'-O-[(2R,4S)-4-(3-chlorophenyl)-2-oxido-1,3,2-dioxaphosphorinan-2-yl]-2'-C-methyl-, 2',3'-bis(2-methylpropanoate) (CA INDEX NAME)

Absolute stereochemistry.



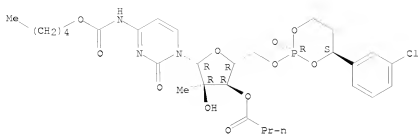
RN 926655-73-4 CAPLUS
 CN Cytidine, 5'-O-[(2R,4S)-4-(3-chlorophenyl)-2-oxido-1,3,2-dioxaphosphorinan-2-yl]-N-[(pentyloxy)carbonyl]-, 3'-(2-methylpropanoate) (CA INDEX NAME)

Absolute stereochemistry.



RN 926655-74-5 CAPLUS
 CN Cytidine, 5'-O-[(2R,4S)-4-(3-chlorophenyl)-2-oxido-1,3,2-dioxaphosphorinan-2-yl]-2'-C-methyl-N-[(pentyloxy)carbonyl]-, 3'-butanoate (CA INDEX NAME)

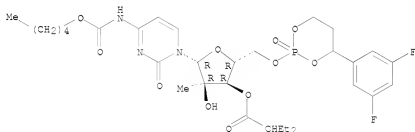
Absolute stereochemistry.



RN 926655-75-6 CAPLUS

CN Cytidine, 5'-O-[(4-(3,5-difluorophenyl)-2-oxido-1,3,2-dioxaphosphorinan-2-yl)-2'-C-methyl-N-[(pentyloxy)carbonyl]-, 3'-(2-ethylbutanoate) (CA INDEX NAME)

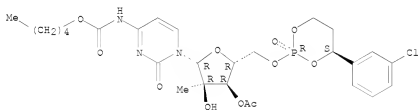
Absolute stereochemistry.



RN 926655-76-7 CAPLUS

CN Cytidine, 5'-O-[(2R,4S)-4-(3-chlorophenyl)-2-oxido-1,3,2-dioxaphosphorinan-2-yl]-2'-C-methyl-N-[(pentyloxy)carbonyl]-, 3'-acetate (CA INDEX NAME)

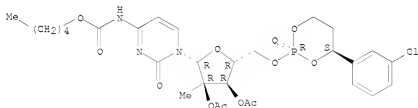
Absolute stereochemistry.



RN 926655-77-8 CAPLUS

CN Cytidine, 5'-O-[(2R,4S)-4-(3-chlorophenyl)-2-oxido-1,3,2-dioxaphosphorinan-2-yl]-2'-C-methyl-N-[(pentyloxy)carbonyl]-, 2',3'-diacetate (CA INDEX NAME)

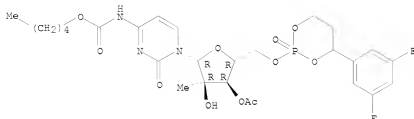
Absolute stereochemistry.



RN 926655-78-9 CAPLUS

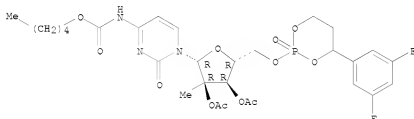
CN Cytidine, 5'-O-[(4-(3,5-difluorophenyl)-2-oxido-1,3,2-dioxaphosphorinan-2-yl)-2'-C-methyl-N-[(pentyloxy)carbonyl]-, 3'-acetate (CA INDEX NAME)

Absolute stereochemistry.



RN 926655-80-3 CAPLUS
 CN Cytidine, 5'-O-[4-(3,5-difluorophenyl)-2-oxido-1,3,2-dioxaphosphorinane-2-yl]-2'-C-methyl-N-[(pentyloxy)carbonyl]-, 2',3'-diacetate (CA INDEX NAME)

Absolute stereochemistry.



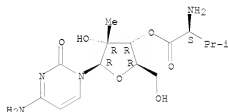
L11 ANSWER 15 OF 37 CAPLUS COPYRIGHT 2008 ACS ON STN
 AN 2007:85871 CAPLUS
 DN 146:177157
 TI Small animal model for HCV replication
 IN Weiner, Amy; Aukerman, Sharon Lea; Mendel, Dirk; Zhu, Qing
 PA Novartis A.-G., Switz.
 SO PCT Int. Appl., 85pp.
 CODEN: P1XXD2
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2007011777	A2	20070125	WO 2006-US27485	20060715
WO 2007011777	A3	20071011		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA			
CA 2615626	A1	20070125	CA 2006-2615626	20060715
EP 1909564	A2	20080416	EP 2006-787397	20060715
R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS			
PRAI US 2005-700475P	P	20050718		
US 2006-776640P	P	20060223		
WO 2006-US27485	W	20060715		
AB	An animal model for HCV (hepatitis C virus) replication and/or production of virus or virus like particles is provided. The invention utilizes an HCV replicon present in a cell to			

deliver HCV nucleic acid and replicate and express HCV proteins in an animal model comprising an animal that has been immunocompromised. The invention further provides a method of treatment or prevention of HCV in a mammal which comprises administering to the mammal a combination which comprises an immunomodulatory compound and another antiviral agent. Also provided are cell lines showing a decreased sensitivity to interferon alpha or some other immunomodulator and methods of making or isolating such cell lines.

II 640281-90-9, Valopicitabine
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (small animal model for hepatitis C virus replication)
 RN 640281-90-9 CAPLUS
 CN L-Valine, 3'-ester with 2'-C-methylcytidine (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L11 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2006:1283521 CAPLUS

DN 146:20343

TI Use of 4-[3,5-Bis-(2-hydroxyphenyl)-[1,2,4]-triazol-1-yl]benzoic acid for the treatment of liver diseases in which iron plays a role in pathogenesis

IN Alberti, Daniele; Marks, Peter; Nick, Hanspeter; Rojckjaer, Lisa Grace

PA Novartis AG, Switz.; Novartis Pharma GmbH

SO FCT Int. Appl., 20pp.

CODEN: PIXMD2

DT Patent

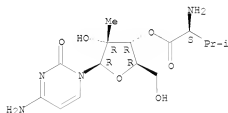
LA English

FAN: CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006130532	A2	20061207	WO 2006-US20677	20060530
	WO 2006130532	A3	20071122		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CZ, DE, DK, DM, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, ME, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MM, MG, NA, SD, SE, TG, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AF, EA, EP, OA			
	AU 2006252718	A1	20061207	AU 2006-252718	20060530
	CA 2608709	A1	20061207	CA 2006-2608709	20060530
	EP 1893198	A2	20080305	EP 2006-771445	20060530
	R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU			
	CN 101180053	A	20080514	CN 2006-80017617	20071121
	KR 2008003933	A	20080514	KR 2007-727922	20071129
	MX 200715085	A	20080117	MX 2007-15085	20071129
	NO 2007006595	A	20071220	NO 2007-6595	20071220
PRAI	US 2005-685848P	P	20050531		
	US 2005-692808P	P	20050622		
	US 2006-746786P	P	20060509		
	WO 2006-US20677	W	20060530		

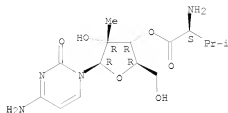
- AB The invention discloses use of 4-[3,5-Bis-(2-hydroxyphenyl)-[1,2,4]-triazol-1-yl]benzoic acid for the manufacture of pharmaceutical compns. for the treatment of liver diseases in humans in which iron plays a role in pathogenesis, including viral diseases, e.g. chronic hepatitis C, optionally in conjunction with antiviral agents and for the treatment of nonviral diseases, e.g. non-alc. steatohepatitis and non-alc. fatty liver disease.
- IT 640281-90-9, Valopicitabine
 RI: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (triazolyl benzoic acid derivative for treatment of liver diseases in which iron plays role in pathogenesis)
- RN 640281-90-9 CAPLUS
- CN L-Valine, 3'-ester with 2'-C-methylcytidine (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



- L11 ANSWER 17 OF 37 CAPLUS COPYRIGHT 2008 ACS ON STM
- AN 2006:257296 CAPLUS
- DN 146:54578
- TI Recent patents on nucleoside and nucleotide inhibitors for HCV
- AU Shim, Jae H.; Hong, Zhi; Wu, Jin Z.
- CS Drug Discovery, Valeant Pharmaceuticals International, Costa Mesa, CA, 92626, USA
- SO Recent Patents on Anti-Infective Drug Discovery (2006), 1(3), 323-331
 CODEN: RPADCK; ISSN: 1574-891X
- PB Bentham Science Publishers Ltd.
- DI Journal, General Review
- LA English
- AB A review. Hepatitis C virus (HCV) infection is a leading cause of liver diseases such as cirrhosis and hepatocellular carcinoma. There are estimated 170 million people worldwide chronically infected with the virus. The lack of highly effective and safe therapeutics for HCV infection has spurred intensive efforts to develop anti-HCV drugs as evidenced by the large number of new patent applications filed each year. Nucleoside and nucleotide inhibitors are the analogs of DNA or RNA substrates, and they inhibit viral polymerases by acting as chain terminators, viral mutagens, or simple competitive inhibitors. The successful development of various nucleoside and nucleotide inhibitors for the treatment of HIV and HBV infections has prompted the drug industry to seek similar strategies for HCV. This review summarizes recently issued or published patents covering nucleoside and nucleotide inhibitors for HCV. The claimed chemical structures and available biol. activities, mechanism of action, and drug resistance profiles are discussed. The development status of several promising nucleoside inhibitors is also described.
- IT 640725-71-9, NM283
 RI: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (recent patents on nucleoside and nucleotide inhibitors for HCV)
- RN 640725-71-9 CAPLUS
- CN L-Valine, 3'-ester with 2'-C-methylcytidine, hydrochloride (1:2) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

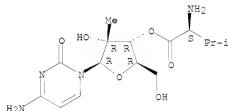


● 2 HCL

RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L11 ANSWER 18 OF 37 CAPLUS COPYRIGHT 2008 ACS ON STM
AN 2006:1086375 CAPLUS
DN 146:54739
TI Ribavirin antagonizes the in vitro anti-hepatitis C virus activity of 2'-C-methylcytidine, the active component of valopicitabine
AU Coelmont, Lotte; Paeschuyse, Jan; Windisch, Marc P.; De Clercq, Erik; Bartenschlager, Ralf; Neyts, Johan
CS Rega Institute for Medical Research, KULeuven, Louvain, 3000, Belg.
SO Antimicrobial Agents and Chemotherapy (2006), 50(10), 3444-3446
CODEN: AACCCQ; ISSN: 0066-4804
PB American Society for Microbiology
DT Journal
LA English
AB Ribavirin antagonizes the in vitro anti-hepatitis C virus (HCV) activity of the pyrimidine nucleoside analog 2'-C-methylcytidine, the active component of the exptl. anti-HCV drug valopicitabine. In contrast, the combination of ribavirin with either the purine nucleoside analog 2'-C-methyladenosine or the HCV protease inhibitor VX-950 resulted in an additive antiviral activity. These findings may have implications when planning clinical studies with valopicitabine.
IT 640281-90-9D, Valopicitabine, metabolite
RI: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ribavirin antagonizes anti-hepatitis C virus activity of 2'-C-methylcytidine, active component of valopicitabine)
RN 640281-90-9 CAPLUS
CN L-Valine, 3'-ester with 2'-C-methylcytidine (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L11 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2008 ACS ON STM
AN 2006:1045856 CAPLUS
DN 146:28022
TI Synthesis and Pharmacokinetics of Valopicitabine (NM283), an Efficient Prodrug of the Potent Anti-HCV Agent 2'-C-Methylcytidine
AU Pierre, Claire; Amador, Agnes; Benzaria, Samira; Cretton-Scott, Erika; D'Amours, Marc; Mao, John; Mathieu, Steven; Moussa, Adel; Bridges, Edward

G.; Standing, David N.; Sommadossi, Jean-Pierre; Storer, Richard; Gosselin, Gilles

CS Laboratoire Cooperatif Idenix-CNRS-Universite Montpellier II Case Courrier 008, Universite Montpellier II, Montpellier, 34095, Fr.

SO Journal of Medicinal Chemistry (2006), 49(22), 6614-6620

CODEN: JMCMAR; ISSN: 0022-2623

PB American Chemical Society

DT Journal

LA English

OS CASREACT 146:28022

AB In the search for new therapeutic agents against chronic hepatitis C, 2'-C-methylcytidine was discovered to be a potent and selective inhibitor in cell culture of a number of RNA viruses, including the pestivirus bovine viral diarrhoea virus, a surrogate model for hepatitis C virus (HCV), and three flaviviruses, namely, yellow fever virus, West Nile virus, and dengue-2 virus. However, pharmacokinetic studies revealed that 2'-C-methylcytidine suffers from a low oral bioavailability. To overcome this limitation, the authors have synthesized the 3'-O-L-valinyl ester derivative (NM-283; dihydrochloride salt of valopicitabine) of 2'-C-methylcytidine. The authors present the chemical synthesis and physicochem. characteristics of NM-283, anti-HCV prodrug candidate, as well as a comparative study of its pharmacokinetic parameters with those of its parent nucleoside analog, 2'-C-methylcytidine.

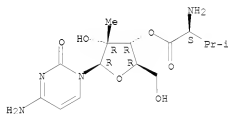
IT 640725-71-9P

RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (preparation and pharmacokinetics of NM-283, a prodrug of anti-HCV agent 2'-C-methylcytidine)

RN 640725-71-9 CAPLUS

CN 1-Valine, 3'-ester with 2'-C-methylcytidine, hydrochloride (1:2) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



● 2 HCL

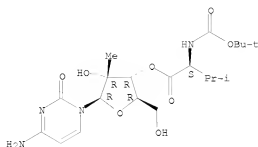
IT 640725-70-8P 642075-44-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and pharmacokinetics of NM-283, a prodrug of anti-HCV agent 2'-C-methylcytidine)

RN 640725-70-8 CAPLUS

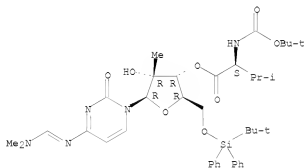
CN 1-Valine, N-[(1,1-dimethylethoxy)carbonyl]-, 3'-ester with 2'-C-methylcytidine (CA INDEX NAME)

Absolute stereochemistry.



RN 642075-44-3 CAPLUS
 CN L-Valine, N-[(1,1-dimethylethoxy)carbonyl]-, 3'-ester with
 5'-O-[(1,1-dimethylethyl)diphenylsilyl]-N-[(dimethylamino)methylene]-2'-C-
 methylcytidine (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry unknown.



RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 20 OF 37 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2006:945608 CAPLUS
 DN 145:313223
 TI Bicyclic nucleosides and nucleotides as therapeutic agents
 IN Francom, Paula; Nearn, Roland Henry; Draffan, Alistair George; Lambert,
 John Nicholas; Bond, Silas
 PA Biote, Inc., USA
 SO PCT Int. Appl., 107pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

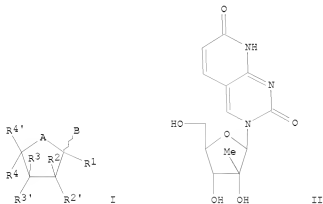
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2006094347	A1	20060914	WO 2006-AU303	20060308
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GN, GW, GU, HT, IL, IN, IS, KE, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
AU 2006222563	A1	20060914	AU 2006-222563	20060308
CA 2600886	A1	20060914	CA 2006-2600886	20060308
EP 1858889	A1	20071128	EP 2006-704976	20060308

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR

PRAI US 2005-661663P P 20050308
WO 2006-AU303 W 20060308

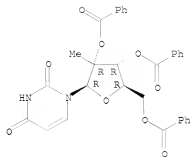
OS CASREACT 149:315225

GI



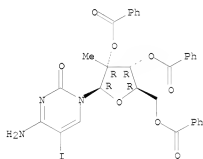
- AB The invention relates to the use of bicyclic nucleosides and nucleotides I, wherein: A is O, S, CH₂, CHF, CF₂ or NR; B is bicyclic heterocycle; R₁, R₂, R₂', R₃, R₃', and R₄ are independently H, halogen, OH, N₃, CN, alkyl, alkenyl, alkynyl, aryl, acyl, arylalkyl, heterocyclyl, heteroaryl, cycloalkyl, cycloalkenyl, alkyloxy, alkenyloxy, alkynoxy, aryloxy, acyloxy, oxyacyl, arylalkoxy, heterocycloxy, heteroaryloxy, cycloalkoxy, cycloalkenoxo, amino, aminoacyl, aminoacyloxy, acylamino, oxyacylamino, oxyacyloxy, acylimino, acyliminoxy, oxyacylimino, aminothioacyl, thioacylamino, aminosulfinyl, aminosulfonyl, thio, thioacyl, thioacyloxy, oxythioacyl, oxythioacyloxy, optionally; R₂ and R₂' together or R₃ and R₃' together represents =O, =S, or =L-Y where L is N, CH, CF, CCl or CBr and Y is H, halogen, N₃, Me, Et or CN; R₄' is -CY₂H, -CY₂OH, -CY₂NH, or L'-R₅; L' is selected from the group consisting of -CY₂-, -CY₂CY₂-, -CY₂OCY₂-, -CY₂SCY₂- and -CY₂NHCY₂-; Y is H, OR, halogen, alkyl, alkenyl, alkynyl; R₅ is OR, NR₂, monophosphate, diphosphate, and triphosphate, or a mono, di or triphosphate mimic; each R is independently H, CF₃, alkyl, alkenyl, alkynyl, aryl, acyl, cycloalkyl, cycloalkenyl, heteroaryl, heterocyclyl; were prepared for the treatment of infectious diseases, and in particular, viral infections. Title compds. were typically active in the replicon assay in the range 1 to >1000 nM and cytotoxic in the range 30 to >100 nM. HCV-polymerase inhibition by title compds. is also reported.
- II 23643-36-9P 909394-67-8P 909394-72-5P
909394-73-6P 909394-74-7P 909394-75-8P
909394-76-9P 909394-77-0P 909394-81-6P
909394-82-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
RN (preparation of bicyclic nucleosides and nucleotides as therapeutic agents)
23643-36-9 CAPUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-(2,3,5-tri-O-benzoyl-2-C-methyl-β-D-ribofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



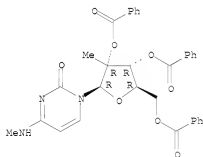
RN 909394-67-8 CAPLUS
CN Cytidine, 5-iodo-2'-C-methyl-, 2',3',5'-tribenzoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



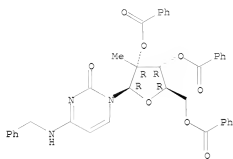
RN 909394-72-5 CAPLUS
CN Cytidine, N-methyl-2'-C-methyl-, 2',3',5'-tribenzoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



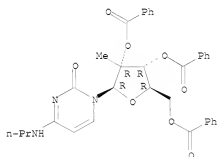
RN 909394-73-6 CAPLUS
CN Cytidine, 2'-C-methyl-N-(phenylmethyl)-, 2',3',5'-tribenzoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



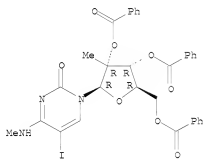
RN 909394-74-7 CAPLUS
CN Cytidine, 2'-C-methyl-N-propyl-, 2',3',5'-tribenzoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



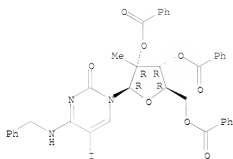
RN 909394-75-8 CAPLUS
CN Cytidine, 5-Iodo-2'-C-methyl-, 2',3',5'-tribenzoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 909394-76-9 CAPLUS
CN Cytidine, 5-Iodo-2'-C-methyl-N-(phenylmethyl)-, 2',3',5'-tribenzoate (9CI) (CA INDEX NAME)

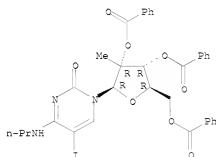
Absolute stereochemistry.



RN 909394-77-0 CAPLUS

CN Cytidine, 5-(1-iodo-2'-C-methyl-N-propyl)-, 2',3',5'-tribenzoate (9CI) (CA INDEX NAME)

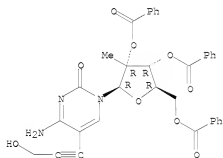
Absolute stereochemistry.



RN 909394-81-6 CAPLUS

CN Cytidine, 5-(3-hydroxy-1-propynyl)-2'-C-methyl-, 2',3',5'-tribenzoate (9CI) (CA INDEX NAME)

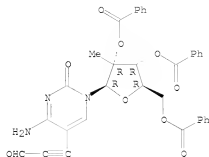
Absolute stereochemistry.



RN 909394-82-7 CAPLUS

CN Cytidine, 2'-C-methyl-5-(3-oxo-1-propynyl)-, 2',3',5'-tribenzoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CMT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 21 OF 37 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2006:894484 CAPLUS

DN 145:285094

TI Glucosidase inhibitor combinations with adjunctive therapies for treating or preventing Flaviviridae infections

IN Dugourd, Dominique; Rubinchik, Evelina; Clement, Jacob; Friedland, Hillel David

PA Migenix Inc., Can.

SO U.S. Pat. Appl. Publ., 69pp.

CODEN: USXXCO

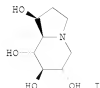
DT Patent

LA English

FAM.CMT 1

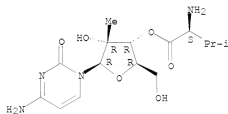
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20060194835	A1	20060831	US 2006-351885	20060209
	AU 2006221080	A1	20060914	AU 2006-221080	20060209
	CA 2597213	A1	20060914	CA 2006-2597213	20060209
	WO 2006096285	A2	20060914	WO 2006-US4927	20060209
	WO 2006096285	A3	20070125		
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	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MM, MZ, NA, SD, SL, SE, SZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	EP 1853317	A2	20071114	EP 2006-748202	20060209
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
	MX 200709561	A	20080114	MX 2007-9561	20070808
	IN 2007KN03225	A	20080321	IN 2007-KN3225	20070831
	KR 2007102741	A	20071019	KR 2007-720540	20070907
PRAI	US 2005-651910P	P	20050209		
	US 2005-664297P	P	20050321		
	US 2005-735464P	P	20051112		
	WO 2006-US4927	W	20060209		

GI



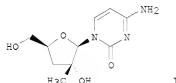
- AB The present disclosure relates generally to compns. having a glucosidase inhibitor [castanospermine (I) or a derivative thereof, such as celgosivir] in combination with adjunctive therapies of compds. that alter immune function (such as interferon) and compds. that alter viral replication (such as nucleoside analogs like ribavirin), which can be used to treat or prevent infections caused by or associated with a virus of the Flaviviridae family, particularly infections caused by or associated with Hepatitis C virus (HCV). Examples include synergy of castanospermine or celgosivir in combination with other drugs such as interferons in a checkboard approach.
- IT 640723-71-9, NM283
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (glucosidase inhibitor combinations with adjunctive therapies for treating or preventing Flaviviridae infections)
- RN 640725-71-9 CAPLUS
- CN L-Valine, 3'-ester with 2'-C-methylcytidine, hydrochloride (1:2) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



● 2 HCl

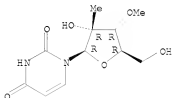
- L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2008 ACS ON STN
- AN 2006:774481 CAPLUS
- DN 146:402230
- TI Synthesis of 2'-C-methylcytidine and 2'-C-methyluridine derivatives modified in the 3'-position as potential antiviral agents
- AU Pierra, Claire; Amador, Agnes; Badaroux, Eric; Storer, Richard; Gosselin, Gilles
- CS Laboratoire Cooperatif Idenix-CNRS-Universite Montpellier II, Universite Montpellier II, Montpellier, 34095/S, Fr.
- SO Collection of Czechoslovak Chemical Communications (2006), 71(7), 991-1010
 CODEN: CCCOAK, ISSN: 0010-0765
- PB Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic
- DT Journal
- LA English
- OS CASREACT 146:402230
- GI



- AB 2'-C-methylcytidine and 2'-C-methyluridine derivs. modified in the 3'-position, e.g. I·HCl, were prepared via Barton deoxygenation, amination, stereoselective cyclization, ring opening and fluorination from 2'-C-methyluridine or uridine. The antiviral activity of the title compds. was tested against RNA viruses and was found to be inactive. It was found that the modification at the 3'-position resulted in loss of

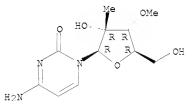
antiviral activity.
 IT 934014-31-0P
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
 (no activity; preparation and antiviral activity of methylcytidine and methyluridine derivs. via Barton deoxygenation, amination, stereoselective cyclization, ring opening and fluorination from methyluridine or uridine)
 RN 934014-31-0 CAPLUS
 CN Uridine, 2'-C-methyl-3'-O-methyl- (CA INDEX NAME)

Absolute stereochemistry.



IT 934014-32-1P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (no activity; preparation and antiviral activity of methylcytidine and methyluridine derivs. via Barton deoxygenation, amination, stereoselective cyclization, ring opening and fluorination from methyluridine or uridine)
 RN 934014-32-1 CAPLUS
 CN Cytidine, 2'-C-methyl-3'-O-methyl-, hydrochloride (1:1) (CA INDEX NAME)

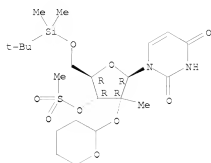
Absolute stereochemistry.



● HCl

IT 934014-23-0P 934014-24-1P 934014-27-4P
 934014-28-5P 934014-30-9P 934014-42-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and antiviral activity of methylcytidine and methyluridine derivs. via Barton deoxygenation, amination, stereoselective cyclization, ring opening and fluorination from methyluridine or uridine)
 RN 934014-23-0 CAPLUS
 CN Uridine, 5'-O-[(1,1-dimethylethyl)dimethylsilyl]-2'-C-methyl-2'-O-(tetrahydro-2H-pyran-2-yl)-, 3'-methanesulfonate (CA INDEX NAME)

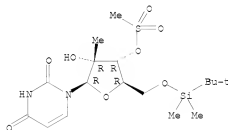
Absolute stereochemistry.



RN 934014-24-1 CAPLUS

CN Uridine, 5'-O-[(1,1-dimethylethyl)dimethylsilyl]-2'-C-methyl-,
3'-methanesulfonate (CA INDEX NAME)

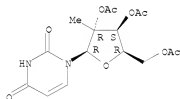
Absolute stereochemistry.



RN 934014-27-4 CAPLUS

CN 2,4-(1R,3H)-Pyrimidinone, 1-(2,3,5-tri-O-acetyl-2-C-methyl-β-D-
xylofuranosyl)- (CA INDEX NAME)

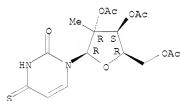
Absolute stereochemistry.



RN 934014-28-5 CAPLUS

CN 2-(1R)-Pyrimidinone, 3,4-dihydro-4-thioxo-1-(2,3,5-tri-O-acetyl-2-C-methyl-
β-D-xylofuranosyl)- (CA INDEX NAME)

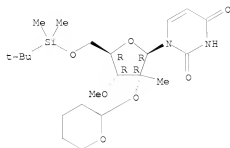
Absolute stereochemistry.



RN 934014-30-9 CAPLUS

CN Uridine, 5'-O-[(1,1-dimethylethyl)dimethylsilyl]-2'-C-methyl-3'-O-methyl-
2'-O-(tetrahydro-2H-pyran-2-yl)- (CA INDEX NAME)

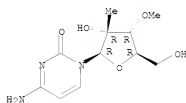
Absolute stereochemistry.



RN 934014-42-3 CAPLUS

CN Cytidine, 2'-O-methyl-3'-O-methyl- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 23 OF 37 CAPLUS COPYRIGHT 2008 ACS ON STN

AN 2006:708636 CAPLUS

DN 146119039

TI Valopicitabine: anti-hepatitis C virus drug

RNA-directed RNA polymerase (NS5B) inhibitor

AU Sorbera, L. A.; Castaner, J.; Leeson, P. A.

CS Prous Science, Barcelona, 08080, Spain

SO Drugs of the Future (2006), 31(4), 320-324

CODEN: DRFUD4; ISSN: 0377-8282

PB Prous Science

DT Journal; General Review

LA English

AB A review. Chronic hepatitis C is caused by infection

with the hepatitis C virus (HCV), a member

of the Flaviviridae family of viruses. Currently available

treatment for HCV, including the standard combination therapy with

interferon and ribavirin, is often unsuccessful at eradicating infection.

In addition, the therapies now used to treat chronic hepatitis

C are associated with substantial side effects. Therefore, new

therapeutic strategies such as the use of antiviral drugs targeted to

HCV-specific viral enzymes are being explored. One such option is

the RNA-directed RNA polymerase (NS5B) inhibitor valopicitabine (NM-283),

an orally bioavailable prodrug of the novel ribonucleoside analog NM-107.

This compound has shown in vitro activity against HCV-related

bovine viral diarrhea virus (BVDV) polymerase. In patients with

HCV-1 infection, valopicitabine produced redns. in HCV

RNA viral load when administered either as monotherapy or in combination

with pegylated interferon. When used together, valopicitabine and

interferon appear to have synergistic antiviral effects both in vitro and

in vivo. The compound is generally well tolerated, with gastrointestinal

effects being the most commonly observed treatment-related adverse events.

IT 640725-71-92, NM-283

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological

activity); PKT (Pharmacokinetics); SPN (Synthetic preparation); THU

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)

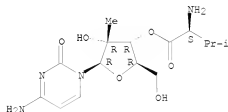
(valopicitabine reduced HCV RNA viral load either as

monotherapy or in combination with pegylated interferon against
HCV-related bovine viral diarrhea virus polymerase and in
patient with hepatitis C virus-1 infection]

RN 640725-71-9 CAPLUS

CN L-Valine, 3'-ester with 2'-C-methylcytidine, hydrochloride (1:2) (CA
INDEX NAME)

Absolute stereochemistry. Rotation (+).



● 2 HCL

RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 24 OF 37 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2008:425398 CAPLUS

DN 145:33734

TI Nucleoside analog inhibitors of hepatitis C virus
replication

AU Carroll, S. S.; Olsen, D. B.

CS Department of Antiviral Research, Merck Research Laboratories, West Point,
PA, 19486, USA

SO Infectious Disorders: Drug Targets (2006), 6(1), 17-29

CODEN: IDDTAD; ISSN: 1871-5265

PE Bentham Science Publishers Ltd.

DI Journal: General Review

LA English

AB A review. Of the 30 compds. currently marketed in the United States for
treatment of viral infections, 15 are nucleoside analogs, demonstrating
the utility of this class of compound as a source of antiviral drugs. The
success of nucleoside analogs in treating other viral infections provides
a compelling rationale for the significant effort that is currently being
devoted to the discovery and development of nucleoside analogs to treat
infection by hepatitis C virus (HCV) that
may lead to improvements in response rates compared to currently available
therapies. Several different approaches were adopted to identify
promising analogs, including the use of surrogate viruses in cell culture
assays, screening in the cell-based bicistronic HCV replicon
assay, and screening nucleoside triphosphates for the ability to inhibit
the activity of the HCV RNA-dependent RNA polymerase in vitro.
Several classes of ribonucleoside analogs with modifications of the ribose
inhibit HCV replication. Nucleoside analogs incorporating a
2'-C-Me modification are potent inhibitors in the replicon assay in the
absence of cytotoxicity, and appear to exert their inhibition by acting as
functional chain terminators of RNA synthesis. NM283, a prodrug of
2'-C-methylcytidine, has entered clin. trials and demonstrated viral load
reductions in subjects infected with genotype 1 HCV, a genotype
known to be difficult to treat effectively with currently approved
therapies. Overall, results to date offer encouragement that improved
therapies to treat HCV infection including newly developed
nucleoside analogs may become available within the next few years.

IT 640725-71-9, NM 283

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

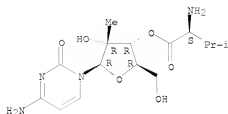
(Biological study); USES (Uses)

(nucleoside analog inhibitors of hepatitis C virus
replication)

RN 640725-71-9 CAPLUS

CN L-Valine, 3'-ester with 2'-C-methylcytidine, hydrochloride (1:2) (CA
INDEX NAME)

Absolute stereochemistry. Rotation (+).



● 2 HCl

RE.CNT 65 THERE ARE 65 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 25 OF 37 CAPLUS COPYRIGHT 2008 ACS ON STN
AN 2006:342840 CAPLUS
DN 144:381956
TI Combination antiviral compositions comprising castanospermine and use for the treatment and prevention of infections caused by or associated with a virus of the Flaviviridae family
IN Dugourd, Dominique
PA Migenix Inc., Can.
SO PCT Int. Appl., 54 pp.
CODEN: PIXX52
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2006037227	A1	20060413	WO 2005-CA1528	20051006
W:				
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW:				
AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, NM, NZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
AU 2005291804	A1	20060413	AU 2005-291804	20051006
CA 2583351	A1	20060413	CA 2005-2583351	20051006
US 20060093577	A1	20060504	US 2005-244811	20051006
EP 1802327	A1	20070704	EP 2005-794475	20051006
R:				
AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
CN 101035555	A	20070912	CN 2005-80034258	20051006
JP 200815816	T	20080515	JP 2007-534981	20051006
MX 200703853	A	20071121	MX 2007-3853	20070329
KR 2007061879	A	20070614	KR 2007-708715	20070417
IN 2007KN01353	A	20070720	IN 2007-KN1353	20070417
FPRI US 2004-616787F	F	20041006		
WO 2005-CA1528	W	20051006		
AB				
The invention discloses the use of castanospermine in combination with another therapeutic agent to treat or prevent infections caused by or associated with a virus of the Flaviviridae family, particularly infections caused by or associated with Hepatitis C virus (HCV), and to the use of such compds. to examine the biol. mechanisms of HCV infection.				
IT 882489-96-5				
RI: BSU (Biological study, unclassified); BIOL (Biological study) (castanospermine-containing combination antiviral compns., and use for treatment of Flaviviridae infections)				

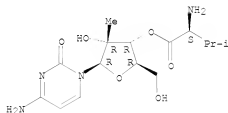
10/609,298

RN 882489-96-5 CAPLUS
CN L-Valine, 3'-ester with 2'-C-methylcytidine, mixt. with
(1S,6S,7R,8R,8aR)-octahydro-1,6,7,8-indolizinetetrol (9CI) (CA INDEX
NAME)

CM 1

CRN 640281-90-9
CMF C15 H24 N4 O6

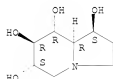
Absolute stereochemistry. Rotation (+).



CM 2

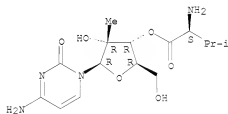
CRN 79831-76-8
CMF C8 H15 N O4

Absolute stereochemistry. Rotation (+).



II 640281-90-9, Valopicitabine
RI: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(castanospermine-containing combination antiviral compns., and use for
treatment of Flaviviridae infections)
RN 640281-90-9 CAPLUS
CN L-Valine, 3'-ester with 2'-C-methylcytidine (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 26 OF 37 CAPLUS COPYRIGHT 2008 ACS ON STM
AN 2006:149315 CAPLUS
DN 144:205728
TI Methods using a Type II interferon receptor agonist alone or in
combination with a direct antiviral drug for treating hepatitis
C virus infection
IN Blatt, Lawrence M.

McIntosh

PA Intermune, Inc., USA
 SO PCT Int. Appl., 139 pp.
 CODEN: PIKXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006016930	A2	20060216	WO 2005-US16927	20050513
	WO 2006016930	A3	20060803		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CM, CO, CR, CU, CZ, DE, DK, DM, DO, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KR, KZ, LC, LG, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			

PRAI US 2004-571322P P 20040514

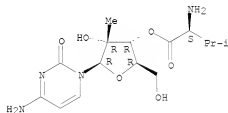
AB The invention provides methods for treating hepatitis C virus (HCV) infection; methods for reducing the incidence of complications associated with HCV and cirrhosis of the liver; and methods for reducing viral load, or reducing the time to viral clearance, or reducing morbidity or mortality in the clin. outcomes, in patients suffering from HCV infection. The methods generally involve administering to the individual a Type II interferon receptor agonist alone or in combination with a direct antiviral drug.

IT 640723-71-9, MW 293
 RI: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (type II interferon receptor agonist alone or in combination with direct antiviral drug for treating hepatitis C virus infection)

RN 640723-71-9 CAPLUS

CN L-Valine, 3'-ester with 2'-C-methylcytidine, hydrochloride (1:2) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



● 2 HCL

111 ANSWER 27 OF 37 CAPLUS COPYRIGHT 2008 ACS ON STM

AN 2006:103884 CAPLUS

DN 144:171198

TI Preparation of alkyl-substituted 2-deoxy-2-fluoro-D-ribofuranosyl pyrimidine and purine nucleoside analogs via condensation of the lactone to nucleosides as potential antiviral agents

IN Wang, Peiyuan; Stee, Wojciech; Clark, Jeremy; Chun, Byoung-Kwon; Shi, Junxing; Du, Jinfa

PA Pharmasset, Inc., USA

SO PCT Int. Appl., 34 pp.

CODEN: PIKXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006012440	A2	20060202	WO 2005-US25916	20050721
	WO 2006012440	A3	20060727		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BE, CA, CH, CM, CO, CR, CU, CZ, DE, DK, DM, DO, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, GU, HT, ID, IL, IN, IS, JP, KE, KG, KM, KN, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	EW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GM, GQ, GW, ML, MR, NE, NM, TD, TG, BW, GH, GM, KE, LS, MM, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BA, KG, KR, MD, RU, TJ, TM			
	AU 2005267051	A1	20060202	AU 2005-267051	20050721
	CA 2574651	A1	20060202	CA 2005-2574651	20050721
	EP 1773856	A2	20070418	EP 2005-775359	20050721
	R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR			
	CN 101023094	A	20070822	CN 2005-80031530	20050721
	BR 2005012104	A	20080311	BR 2005-12104	20050721
FRAI	JP 200507547	T	20080313	JP 2007-522763	20050721
	US 20060199783	A1	20060907	US 2006-353597	20060213
	MX 200700803	A	20070402	MX 2007-803	20070119
	IN 2007KN0605	A	20070706	IN 2007-KN605	20070220
	KR 2007114344	A	20071203	KR 2007-703980	20070220
	US 2004-389868P	P	20040721		
	US 2004-608320P	P	20040909		
	US 2005-183988	A1	20050721		
	WO 2005-US25916	W	20050721		
	MARFAT 144:171198				
OS					
GI					

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

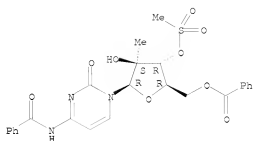
AB A process for preparing of 2-deoxy-2-fluoro-2-methyl-D-ribofuranosides, I, wherein R1 and R2 can independently be H, CH3, acetyl, benzoyl, pivaloyl, 4-nitrobenzoyl, 3-nitrobenzoyl, 2-nitrobenzoyl, 4-chlorobenzoyl, 3-chlorobenzoyl, 2-chlorobenzoyl, 4-methylbenzoyl, 3-methylbenzoyl, 2-methylbenzoyl, 4-phenylbenzoyl, benzyl, 4-methoxybenzyl, trityl, trialkylsilyl, t-butyl-dialkylsilyl, t-butyl-diphenylsilyl, TIPS, THP, MOM, or MEM are prepared and used in the condensation to 2-deoxy-2-fluoro-2-ribofuranosyl pyrimidine and purine nucleoside analogs. Thus, 2-deoxy-2-fluoro-2-ribofuranosyl pyrimidine and purine nucleoside analogs II and III, wherein X is a halogen; Y is N or CH; Z is a halogen, hydroxyl, ether, thiol, thioether, (un)substituted amine or alkyl; R1' is alkyl, vinyl, ethynyl; R2' and R3' can be same or different H, alkyl, arylalkyl, acyl, cyclic acetal such as 2',3'-O-isopropylidene or 2',3'-O-benzylidene, or 2',3'-cyclic carbonate; R4, R5, and R6 are independently H, halogen, hydroxyl, ether, thiol, thioether, N3, (un)substituted amine, (un)substituted amido, alkyl, halogenated alkyl, alkenyl, halogenated alkenyl, alkynyl, halogenated alkynyl, hydroxy alkyl, alkoxy are prepared and are potential anti-HCV agents. Specifically, IV was prepared (no yield, claimed) via condensation, alkylation and stereoselective fluorination reactions and can exhibit potential use as an anti-HCV agent.

IT 874638-81-0P
 RL: INF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of alkyl-substituted 2-deoxy-2-fluoro-2-ribofuranosyl pyrimidine and purine nucleoside analogs via condensation of the lactone to nucleosides)

RN 874638-81-0 CAPLUS

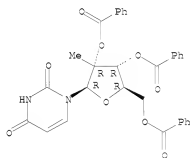
CN Benzamide, N-[1-[5-O-benzoyl-2-C-methyl-3-O-(methylsulfonyl)-β-D-arabinofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (CA INDEX NAME)

Absolute stereochemistry.



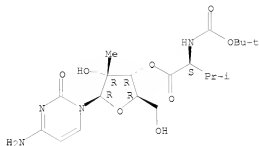
L11 ANSWER 28 OF 37 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2005:1151389 CAPLUS
 DN 145:271979
 TI NM 283, an efficient prodrug of the potent anti-HCV agent
 2'-C-methylcytidine
 AU Piazza, C.; Benzarria, S.; Amador, A.; Moussa, A.; Mathieu, S.; Storer, R.;
 Gosselin, S.
 CS Laboratoire Cooperatif Idenix, CNRS, Universite Montpellier II,
 Montpellier, S, Fr.
 SO Nucleosides, Nucleotides & Nucleic Acids (2005), 24(5-7), 767-770
 CODEN: MNNAFY; ISSN: 1525-7770
 PB Taylor & Francis, Inc.
 DT Journal
 LA English
 OS CASREACT 145:271979
 AB In order to improve the oral bioavailability of 2'-C-methylcytidine, a
 potent anti-HCV agent, the corresponding 3'-O-L-valinyl ester
 derivative (NM 283) has been synthesized. Based on its ease of synthesis and
 its physicochem. properties, NM 283 has emerged as a promising antiviral
 drug for treatment of chronic HCV infection.
 IT 23643-36-9P 640725-70-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation of NM 283 as efficient prodrug of potent anti-HCV
 agent 2'-C-methylcytidine)
 RN 23643-36-9 CAPLUS
 CN 2,4(1H,3H)-Pyrimidinedione, 1-(2,3,5-tri-O-benzoyl-2-C-methyl- β -D-
 ribofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 640725-70-8 CAPLUS
 CN L-Valine, N-[(1,1-dimethylethoxy)carbonyl]-, 3'-ester with
 2'-C-methylcytidine (CA INDEX NAME)

Absolute stereochemistry.



II 640725-71-9P

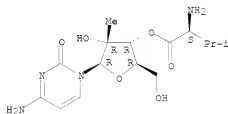
RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)

(prodrug; preparation of NM 283 as efficient prodrug of potent anti-
HCV agent 2'-C-methylcytidine)

RN 640725-71-9 CAPLUS

CN L-Valine, 3'-ester with 2'-C-methylcytidine, hydrochloride (1:2) (CA
INDEX NAME)

Absolute stereochemistry. Rotation (+).



● 2 HCL

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2008 ACS ON STN

AN 2005:684531 CAPLUS

DN 143:431740

II Emerging drugs for chronic hepatitis C

AU Bhopale, Girish Mahadeorao; Nanda, Rabindra Kumar

CS Research and Development Division, Hindustan Antibiotics Limited, Pimpri,
Pune, 411018, India

SO Hepatology Research (2005), 32(3), 146-153

CODEN: HPRSPM; ISSN: 1386-6346

PB Elsevier B.V.

DT Journal; General Review

LA English

AB A review. Hepatitis C virus (HCV) is a
major cause of chronic hepatitis, liver cirrhosis and hepatocellular
carcinoma worldwide. A combination therapy comprising pegylated
interferon and ribavirin currently represents the most effective therapy
for chronic HCV infection. The limitations of this current
therapy mainly its efficacy and significant side effects have prompted the
development of new drugs. Few categories of therapeutic agents appear
promising for future therapy, e.g. novel interferons, ribavirin analogs,
antisense oligonucleotides, short interfering RNAs, ribozymes, enzyme
inhibitors, immunomodulatory agents, antifibrotic agents, therapeutic
vaccines and antibodies. Few drugs belong to afore-mentioned categories
have already reached the different clin. phases of development. The
present article highlights the status of current available therapies and
emerging drugs for the treatment of hepatitis C.

II 640725-71-9, NM 283

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

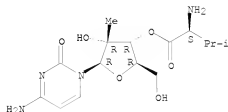
(Biological study); USES (Uses)

(NM283 proved promising therapeutic effect in treating chronic hepatitis C patient)

RN 640725-71-9 CAPLUS

CN L-Valine, 3'-ester with 2'-C-methylcytidine, hydrochloride (1:2) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



● 2 HCL

RE.CNT 64 THERE ARE 64 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 30 OF 37 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2005:648160 CAPLUS

DN 143:248607

TI Design, Synthesis, and Antiviral Activity of 2'-Deoxy-2'-fluoro-2'-C-methylcytidine, a Potent Inhibitor of Hepatitis C Virus Replication

AU Clark, Jeremy L.; Hollecker, Laurent; Mason, J. Christian; Stuyver, Lieven J.; Tharnish, Phillip M.; Lostia, Stefania; McBrayer, Tamara R.; Schinazi, Raymond F.; Watanabe, Kyoichi A.; Otto, Michael J.; Furman, Phillip A.; Stec, Wojciech J.; Patterson, Steven E.; Pankiewicz, Krzysztof W.

CS Pharmasset, Inc., Princeton, NJ, 08540, USA

SO Journal of Medicinal Chemistry (2005), 48(17), 5504-5508

CODEN: JMCNAR; ISSN: 0022-2623

PB American Chemical Society

DT Journal

LA English

OS CASREACT 143:248607

AB The pyrimidine nucleoside- β -D-2'-deoxy-2'-fluoro-2'-C-methylcytidine (I) was designed as a hepatitis C virus RNA-dependent RNA polymerase (HCV RdRp) inhibitor. The title compound was obtained by a DAST fluorination of N4-benzoyl-1-(2-methyl-3,5-di-O-benzoyl- β -D-arabinofuranosyl)cytosine to provide N4-benzoyl-1-(2-fluoro-2-methyl-3,5-di-O-benzoyl- β -D-ribofuranosyl)cytosine. The protected 2'-C-methylcytidine was obtained as a byproduct from the DAST fluorination and allowed for the preparation of two biol. active compds. from a common precursor. Compound I and 2'-C-methylcytidine were assayed in a sub-genomic HCV replicon assay system and found to be potent and selective inhibitors of HCV replication. Compd.I shows increased inhibitory activity in the HCV replicon assay compared to 2'-C-methylcytidine and low cellular toxicity.

IT 863329-62-8P 863329-64-OP

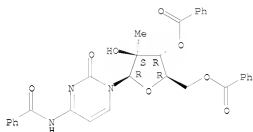
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(design, synthesis via fluorination, and antiviral activity of 2'-deoxy-2'-fluoro-2'-C-methylcytidine, a potent inhibitor of Hepatitis C virus replication)

RN 863329-62-8 CAPLUS

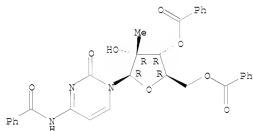
CN Benzamide, N-[1-(3,5-di-O-benzoyl-2-C-methyl- β -D-arabinofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 863329-64-0 CAPLUS
 CN Cytidine, N-benzoyl-2'-C-methyl-, 3',5'-dibenzoate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

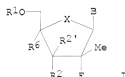


RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 31 of 37 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2005:34765 CAPLUS
 DN 142:94074
 TI Preparation of modified fluorinated (2'R)-2'-deoxy-2'-fluoro-2'-C-methyl
 nucleoside analogs as antiviral agents
 IN Clark, Jeremy
 PA Pharmaserv, Ltd., Barbados
 SO PCT Int. Appl., 228 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005030147	A2	20050113	WO 2004-US12472	20040421
WO 2005030147	A3	20050303		
W:				
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,				
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,				
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,				
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NI,				
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SV,				
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW:				
BW, GH, GM, KE, LS, MW, ME, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,				
BY, BG, KE, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,				
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,				
SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,				
TD, TG				
AU 2004253860	A2	20050113	AU 2004-253860	20040421
AU 2004253860	A1	20050113		
CA 2527657	A1	20050113	CA 2004-2527657	20040421
US 20050009737	A1	20050113	US 2004-828753	20040421
EP 1633766	A2	20060315	EP 2004-775900	20040421
R:				
AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR				
BR 2004010846	A	20060627	BR 2004-10846	20040421
CN 1816558	A	20060809	CN 2004-80019148	20040421
JP 2006526629	T	20061124	JP 2006-513231	20040421
MX 2005PA12788	A	20060222	MX 2005-PA12788	20051125
IN 2005DN06087	A	20080509	IN 2005-DN06087	20051227

	NO 2005006221	A	20051228	NO 2005-6221	20051228
	US 20080070861	A1	20080320	US 2007-854218	20070912
PRAI	US 2003-474368P	P	20030530		
	US 2004-828753	A3	20040421		
WO	2004-US12472	W	20040421		
OS	MARPAT 142:94074				
GI					



AB The disclosed invention provides nucleoside analogs I, wherein B is purine and pyrimidine nucleobase; X is O, S, CH₂, Se, NH, N-alkyl, CHW, C(W)2; W is F, Cl, Br, Iodo; R1 is H, phosphate, H-phosphonate, acyl, Ph, alkyl, carboxyalkylamino, sulfonate ester, peptide, amino acid, sugar residue; R2 and R2' are independently H, alkyl, alkenyl, alkynyl, vinyl, N3, CN, halogen, NO₂, ester, alkoxy, thioalkyl, sulfoxide, sulfonyl; R6 is alkyl, CN, Me, OMe, OEt, CH₂OH, CH₂F, N3, CHCN, CH₂N3, CH₂NH₂, CH₂NHMe, CH₂NMe₂, alkyl; and methods of treating a Flaviviridae infection, including hepatitis C virus, West Nile Virus, yellow fever virus, and a rhinovirus infection in a host, including animals, and especially human, using a (2'R)-2'-deoxy-2'-fluoro-2'-C-Me nucleosides, or a pharmaceutically acceptable salt or prodrug thereof. Thus, (2'R)-2'-deoxy-2'-fluoro-2'-C-methylcytidine was prepared and tested as antiviral agent. The effects the nucleoside analogs tested on human bone marrow cells are reported. (2'R)-2'-deoxy-2'-fluoro-2'-C-methylcytidine shows activity against Rhinovirus, West Nile virus, Yellow Fever virus, and Dengue virus. Cytotoxicity and effect of nucleoside analogs on human bone marrow cells are reported.

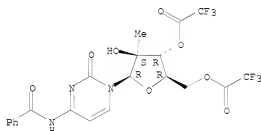
IT 817204-36-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or Reagent)
(preparation of modified fluorinated (2'R)-2'-deoxy-2'-fluoro-2'-C-Me nucleoside analogs as antiviral agents)

RN 817204-36-7 CAPLUS

CN Benzamide, N-[1,2-dihydro-1-[2-C-methyl-3,5-bis-O-(trifluoroacetyl)-β-D-arabinofuranosyl]-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L11 ANSWER 32 OF 37 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2004:780543 CAPLUS

DN 141:296247

TI Preparation of cytidine nucleoside analogs as antiviral agents

IN Girardet, Jean-Luc; Koh, Yung-Hyo; An, Haoyun; Hong, Zhi

PA Ribopharm Inc., USA

SO PCT Int. Appl., 59 pp.

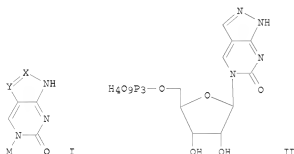
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004089466	A1	20040923	WO 2003-US6992	20030307
	W:	AE, AG, AI, AM, AT, AU, AZ, BA, BE, BG, BR, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DS, EC, EE, EG, FI, GB, GD, GE, GM, GN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SI, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GM, GQ, GW, ML, MR, NE, SN, TD, TG			
	AU 2003225705	A1	20040930	AU 2003-225705	20030307
PRAI	WO 2003-US6992	A	20030307		
OS	MARPAT 141:296247				
GI					



AB Cytidine analogs I, wherein -X=Y- is -N=N-, -CH=N-, -N=CZ- or -CH=CE-, wherein Z is H, halogen, or alkyl, and wherein M is a sugar or sugar analog; wherein the compound has a D-configuration or an L-configuration; with the proviso that where M is a substituted sugar with a ribofuranose ring having a heteroatom and substituents R1 and R2 on the C3'-atom, R3 and R4 on the C2'-atom, and R5 on the C5'-atom, R1-R4 together are not independently H, OH, F, NH2, N3, O-hydrocarbyl, or a reporter moiety, when the heteroatom is O, S, Se, SO, N-alkyl, or CH2, and when R5 is OH, SH, NH2, monophosphate, diphosphate, triphosphate, thiophosphate, or boranophosphate; and with the further proviso that M does not comprise a cyclopropenyl group, a morpholino group, or M is not a phosphonylmethoxyethyl-, their prodrugs and/or metabolites are employed as pharmaceutically active compds. for treatment of diseases responsive to such compds. Particularly preferred diseases include viral diseases (e.g., HCV infection) and neoplasms (no biol. data). Thus nucleoside analog II was prepared and tested as antiviral agent. The virus is an HCV virus, an HIV virus, an RSV virus, an influenza virus, or an HBV virus.

II 23643-36-9

RI: RCT (Reactant); RACT (Reactant or reagent)

(preparation of cytidine nucleoside analogs as antiviral agents)

RN 23643-36-9 CAPUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-(2,3,5-tri-O-benzoyl-2-C-methyl-β-D-ribofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

These compds. are useful as antiviral agents, and in particular, can be used to treat Flaviviridae infections in a host in need thereof (no data). Thus, 9-(2'-C-methyl-3'-O-valinoyl-β-D-ribofuranosyl)-6-N-methyladenine dihydrochloride was prepared via regioselective esterification of 9-(2'-C-methyl-β-D-ribofuranosyl)-6-N-methyladenine with N-(tert-butoxycarbonyl)-L-valine.

640/25-70-8P

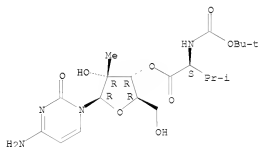
RI: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(process for production of nucleoside prodrugs via regioselective esterification)

640/23-70-8 CAPLUS

CN L-Valine, N-[(1,1-dimethylethoxy)carbonyl]-, 3'-ester with 2'-C-methylcytidine (CA INDEX NAME)

Absolute stereochemistry.



L11 ANSWER 34 OF 37 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2004:453348 CAPLUS

DN 141:17578

TI Treatment of Flaviviridae infection with 2'-branched nucleosides and another mutation-inducing drug such as interferon

IN Sommadossi, Jean-Pierre; La Colla, Paolo; Standing, David; Bichko, Vadim; Qu, Lin

PA Idenix (Cayman) Limited, Cayman I.; Università Degli Studi Di Cagliari

SO PCT Int. Appl., 166 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004046331	A2	20040603	WO 2003-US36714	20031117
WO 2004046331	A2	20060302		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TE, UG, ZM, ZW, AM, AZ, BY, BG, KE, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2506129	A1	20040603	CA 2003-2506129	20031117
AU 2003298658	A1	20040615	AU 2003-298658	20031117
US 20050031588	A1	20050210	US 2003-715729	20031117
EP 1576138	A2	20050921	EP 2003-796412	20031117
R:	AI, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
BR 2003016363	A	20051004	BR 2003-16363	20031117
JP 2006519753	T	20060831	JP 2004-553823	20031117
CN 1849142	A	20061018	CN 2003-80108747	20031117
MX 2005PA05192	A	20050908	MX 2005-PA5192	20050513
NO 20050202920	A	20050815	NO 2005-2920	20050615
PRAI US 2002-426675P	P	20021115		
WO 2003-US36714	W	20031117		

OS MARPAT 141:17578

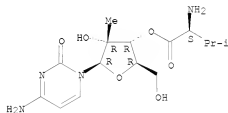
AB The present invention discloses a method for the treatment of a Flaviviridae infection that includes the administration of a 2'-branched nucleoside, or a pharmaceutically acceptable prodrug and/or salt thereof, to a human in need of therapy in combination or alternation with a drug that directly or indirectly induces a mutation in the viral genome at a location other than a mutation of a nucleotide that results in a change from serine to a different amino acid in the highly conserved consensus sequence, XRXuSuGXXXT, of domain B of the RNA polymerase region, or is associated with such a mutation. The invention also includes a method to detect a mutant strain of Flaviviridae and a method for its treatment. Thus, in bovine viral diarrhoea virus (BVDV)-infected MDBK cells treated with β -D-2'-methylcytidine, viruses resistant to the nucleoside appeared. The drug resistance was associated with a mutation in the NS5B gene which resulted in an S405T substitution in the encoded RNA-dependent RNA polymerase. These mutant viruses were sensitive to Intron A (interferon α -2b). Intron A and β -D-2'-methylcytidine exhibited synergistic inhibitory activity on BVDV growth in MDBK cells.

II 640281-90-9
 RI: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (treatment of Flaviviridae infection with 2'-branched nucleosides and another mutation-inducing drug such as interferon)

RN 640281-90-9 CAPLUS

CN 1-Valine, 3'-ester with 2'-C-methylcytidine (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L11 ANSWER 35 OF 37 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2004:20697 CAPLUS

DN 140:87662

II 2'- and 3'-nucleoside prodrugs for treating Flaviviridae infections

IN Sommadossi, Jean-pierre; La Colla, Paolo; Storer, Richard; Gosselin, Gilles

PA Idenix (Cayman) Limited, Cayman I.; Centre National de la Recherche Scientifique; Universita Degli Studi di Cagliari

SO PCT Int. Appl., 2498 pp.

CODEN: PIXXD2

DI Patent

LA English

FAN.CNT 4

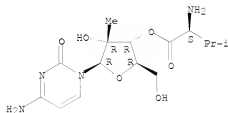
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004003000	A2	20040108	WO 2003-IB3901	20030627
	WO 2004003000	A3	20041104		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, ME, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SV, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW:	GH, GM, KE, LS, MW, ME, SD, SI, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA	2490200	A1	20040108	CA 2003-2490200	20030627
AU	2003263412	A1	20040119	AU 2003-263412	20030627
EP	1525209	A2	20050427	EP 2003-761749	20030627
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CN	1678621	A	20051005	CN	2003-820690	20030627
JP	2005537242	T	20051208	JP	2004-517162	20030627
CN	1761677	A	20060419	CN	2003-820501	20030627
US	20070087960	A1	20070419	US	2003-608907	20030627
BR	2003012271	A	20071106	BR	2003-12271	20030627
CN	101172992	A	20080507	CN	2007-10193301	20030627
CN	101172993	A	20080507	CN	2007-10199501	20030627
WO	2005020884	A2	20050310	WO	2004-US15395	20040514
WO	2005020884	A3	20060622			
W:	AE, AG, AL, AN, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MM, NA, NI, NL, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SN, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW:	BH, BH, GM, GM, KE, LC, MA, ME, NA, SD, SL, SZ, TG, UG, ZM, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
EP	1656093	A2	20060517	EP	2004-776022	20040514
R:	AI, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, ST, LT, LV, FI, RO, MS, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR					
US	20070027063	A1	20070201	US	2004-5468	20041206
US	20070027104	A1	20070201	US	2004-5469	20041206
US	20070027066	A1	20070201	US	2004-5470	20041206
US	20070032449	A1	20070208	US	2004-5441	20041206
US	20070032407	A1	20070208	US	2004-5473	20041206
US	7192936	B2	20070320			
US	20070037735	A1	20070215	US	2004-5442	20041206
US	20070042939	A1	20070222	US	2004-5445	20041206
US	20070042991	A1	20070222	US	2004-5447	20041206
US	7365057	B2	20080429			
US	20070042940	A1	20070222	US	2004-5467	20041206
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IN	2005DN00341	A	20070202	IN	2005-DN341	20050128
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FRAI	US 2002-392350P	P	20020628			
US	2002-392351P	P	20020628			
US	2003-466194P	P	20030428			
US	2003-470949P	P	20030514			
CN	2003-820301	A3	20030627			
CN	2003-820701	A3	20030627			
US	2003-607909	A1	20030627			
US	2003-608907	A1	20030627			
US	2003-609298	A1	20030627			
WO	2003-1B3901	W	20030627			
WO	2004-US15395	W	20040514			
OS	MARPAT 140:87662					
AB	2' And 3'-Prodrugs of 1', 2', 3', or 4'-branched β -D or β -L nucleosides, or their pharmaceutically acceptable salts and derivs., are described which are useful in the prevention and treatment of Flaviviridae infections and other related conditions. These modified nucleosides provide superior results against flaviviruses and pestiviruses, including hepatitis C virus and viruses generally that replicate through an RNA-dependent RNA reverse transcriptase. Comps., compns., methods and uses are provided for the treatment of Flaviviridae infection, including HCV infection, that include the administration of an effective amount of the prodrugs of the invention, or their pharmaceutically acceptable salts or derivs. These drugs may optionally be administered in combination or alternation with further antiviral agents to prevent or treat Flaviviridae infections and other related conditions. Preparation of comps. of the invention is included.					
IT	640725-71-9P					
	RI: PAC (Pharmacological activity); PKT (Pharmacokinetics); SPN (Synthetic					

preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(nucleoside prodrugs for treating Flaviviridae infections)

RN 640/23-71-9 CAPLUS
CN L-Valine, 3'-ester with 2'-C-methylcytidine, hydrochloride (1:2) (CA INDEX NAME)

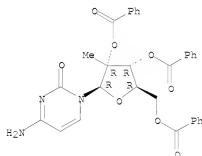
Absolute stereochemistry. Rotation (+).



● 2 HCL

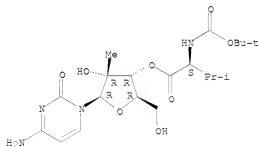
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RI: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(nucleoside prodrugs for treating Flaviviridae infections)
RN 640/23-69-5 CAPLUS
CN Cytidine, 2'-C-methyl-, 2',3',5'-tribenzoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 640/23-70-8 CAPLUS
CN L-Valine, N-[(1,1-dimethylethoxy)carbonyl]-, 3'-ester with 2'-C-methylcytidine (CA INDEX NAME)

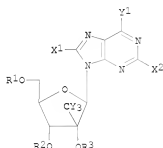
Absolute stereochemistry.



AN 2004:20696 CAPLUS
 DN 140:77365
 TI Preparation of modified 2'- and 3'-nucleoside prodrugs for treating
 Flaviviridae infections
 IN Gonnardossi, Jean-pierre; La Colla, Paolo; Storer, Richard; Gosselin,
 Gilles
 PA Idenix (Cayman) Limited, Cayman I.; Università degli studi di Cagliari;
 Centre National de la Recherche Scientifique
 SO PCT Int. Appl., 201 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 4

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PI	WO 2004002999	A2	20040108	WO 2003-IB3246	20030627
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	WO 2003247084	A1	20040119	AU 2003-247084	20030627
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	CN 101172992	A	20080507	CN 2007-10193301	20030627
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	US	2003-466194P	P	20030428			
	US	2003-470949P	P	20030514			
	CN	2003-820501	A3	20030627			
	CN	2003-820701	A3	20030627			
	US	2003-607909	A1	20030627			
	US	2003-608907	A1	20030627			
	US	2003-609298	A1	20030627			
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OS	WO	2004-0515395	W	20040514			
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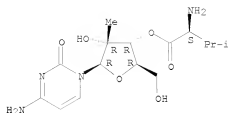


I

AB 2' And/or 3' prodrugs of 1', 2', 3' or 4'-branched-nucleosides I, wherein R1-R3 are independently H, phosphate, alkyl, acyl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-substituted aryl, sulfonate ester, benzyl, wherein the Ph group is optionally substituted with one or more substituents, alkylsulfonfyl, arylsulfonfyl, aralkylsulfonfyl, lipid, amino acid, carbohydrate, peptide, cholesterol; Y1 is hydrogen, bromo, chloro, fluoro, iodo, CN, OH, OR4, NH2, NHR4, NR4R5, SH or SR4; X1 and X2 are independently alkyl, CH3, CF3, CY3, 2-Bz-Et, CH2F, CH2Cl, CH2CF3, CF2CF3, CY2CY3, CH2OH, alkenyl, alkynyl, COOH, COOR4, COO-alkyl, COO-aryl, COO-alkoxyalkyl, CONH2, CONHR4, CON(R4)2, halo, CN, N3, OH, OR4, NH2, NHR4, NR4R5, SH or SR5; Y is independently H, halo; and each R4 and R5 is independently hydrogen, acyl, alkyl, lower alkyl, alkenyl, alkynyl or cycloalkyl, and their pharmaceutically acceptable salts and derivs. are described. These prodrugs are useful in the prevention and treatment of Flaviviridae infections, including HCV infection, and other related conditions. Comps. and compns. of the prodrugs of the present invention are described. Methods and uses are also provided that include the administration of an effective amount of the prodrugs of the present invention, or their pharmaceutically acceptable salts or derivs. These drugs may optionally be administered in combination or alteration with further anti-viral agents to prevent or treat Flaviviridae infections and other related conditions. Thus, antiviral activity of β -D-2'-C-methyl-7-methyl-6-phenyl-3,3a,5,8a-tetrahydro-1,3,4,5,7a-penta-aza-s-indacen-8-one is reported.

IT 640281-90-9P
 RI: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of modified and nucleoside prodrugs for treating flaviviridae infections)
 RN 640281-90-9 CAPLUS
 CN L-Valine, 3'-ester with 2'-C-methylcytidine (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L11 ANSWER 37 OF 37 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2004:20443 CAPLUS

DN 140:70984

TI 2'-C-methyl-3'-O-L-valine ester ribofuranosyl cytidine for treatment of flaviviridae infections

IN Comandossi, Jean-Pierre; La Colla, Paolo

PA Idenix (Cayman) Limited, Cayman I.; Universita Degli Studi di Cagliari

SO FCT Int. Appl., 110 pp.

CODEN: PAXX22

DT Patent

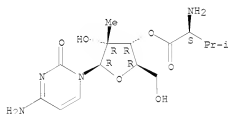
LA English

FAN.CNT 4

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AU	2003248748	A1	20040119	AU 2003-248748	20030627
US	20040077587	A1	20040422	US 2003-607909	20030627
EP	1536804	A2	20050608	EP 2003-762183	20030627
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JP	2005533824	T	20051110	JP 2004-518041	20030627
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NZ	537662	A	20071026	NZ 2003-537662	20030627
CN	101172992	A	20080507	CN 2007-10193301	20030627
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US	7192936	B2	20070320		
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US	20070042991	A1	20070222	US 2004-5447	20041206
US	7365037	B2	20080429		
US	20070042940	A1	20070222	US 2004-5467	20041206
US	20070042990	A1	20070222	US 2004-5471	20041206
US	20070060503	A1	20070315	US 2004-5440	20041206
US	20070060498	A1	20070315	US 2004-5444	20041206
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IN	2007DN08806	A	20080111	IN 2007-DN8806	20071118
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IN	2005-DN344	A3	20050128		
OS	MARFAT 140:70984				
AB	The 3'-L-valine ester of β -D-2'-C-methyl-ribofuranosyl cytidine provides superior results against flaviviruses and pestiviruses, including hepatitis C virus. Based on this discovery, compds., compns., methods and uses are provided for the treatment of flaviviridae, including HCV, that include the administration of an effective amount of val-mCyd or its salt, ester, prodrug or derivative, optionally in a pharmaceutically acceptable carrier. In an alternative embodiment, val-mCyd is used to treat any virus that replicates through an RNA-dependent RNA polymerase. Several examples are provided of the pharmacol., mechanism of action, metabolism, side effects, and clin. efficacy of the title compound				
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	642075-52-3	642075-53-4	642075-54-5		
	642075-55-6	642075-56-7	642075-57-8		
	642075-58-9	642075-59-0	642075-60-3		
	642075-61-4	642075-62-5	642075-63-6		
	642075-64-7	642075-65-8	642075-66-9		
	642075-67-0	642075-68-1	642075-69-2		
	642075-70-5	642075-71-6	642075-72-7		
	642075-74-9	642075-75-0	642075-76-1		
	642075-77-2				
	RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (ribofuranosylcytidine methylvaline ester combined with other antivirals for treatment of flaviviridae infections)				
RN	640281-90-9	CAPLUS			
CN	L-Valine, 3'-ester with 2'-C-methylcytidine	(CA INDEX NAME)			

Absolute stereochemistry. Rotation (+).



RN	642075-50-1	CAPLUS
CN	L-Valine, 3'-ester with 2'-C-methylcytidine, 4-methylbenzenesulfonate (salt) (9CI)	(CA INDEX NAME)

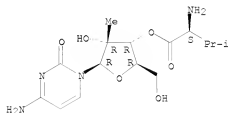
10/609,298

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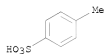
Absolute stereochemistry. Rotation (+).



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CRN 104-15-4

CMF C7 H8 O3 S



RN 642075-51-2 CAPLUS

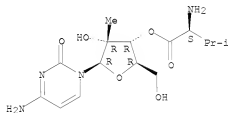
CN L-Valine, 3'-ester with 2'-C-methylcytidine, methanesulfonate (salt) (9CI)
(CA INDEX NAME)

CM 1

CRN 640281-90-9

CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).



CM 2

CRN 75-75-2

CMF C H4 O3 S



RN 642075-52-3 CAPLUS

CN L-Valine, 3'-ester with 2'-C-methylcytidine, acetate (salt) (9CI) (CA

McIntosh

10/609,298

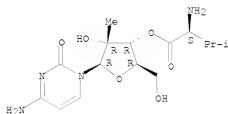
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CM 1

CRN 640281-90-9

CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).



CM 2

CRN 64-19-7

CMF C2 H4 O2



RN 642075-53-4 CAPLUS

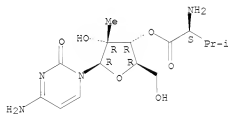
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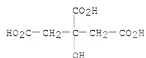
Absolute stereochemistry. Rotation (+).



CM 2

CRN 77-92-9

CMF C6 H8 O7



RN 642075-54-5 CAPLUS

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McIntosh

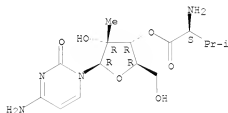
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CM 1

CRN 640281-90-9

CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).



CM 2

CRN 141-82-2

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RN 642075-55-6 CAPLUS

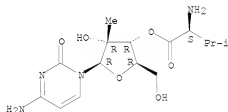
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CM 1

CRN 640281-90-9

CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).

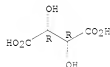


CM 2

CRN 87-69-4

CMF C4 H6 O6

Absolute stereochemistry.



RN 642075-56-7 CAPLUS

CN 1-Valine, 3'-ester with 2'-C-methylcytidine, butanedioate (salt) (9CI) (CA INDEX NAME)

McIntosh

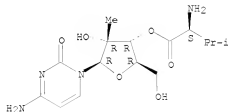
10/609,298

CM 1

CRN 640281-90-9

CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).



CM 2

CRN 110-15-6

CMF C4 H6 O4

$\text{HO}_2\text{C}-\text{CH}_2-\text{CH}_2-\text{CO}_2\text{H}$

RN 642075-57-8 CAPLUS

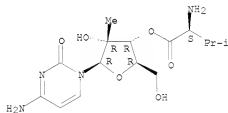
CN L-Valine, 3'-ester with 2'-C-methylcytidine, benzoate (salt) (9CI) {CA INDEX NAME}

CM 1

CRN 640281-90-9

CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).



CM 2

CRN 65-85-0

CMF C7 H6 O2



RN 642075-58-9 CAPLUS

CN L-Ascorbic acid, compd. with L-valine 3'-ester with 2'-C-methylcytidine (9CI) {CA INDEX NAME}

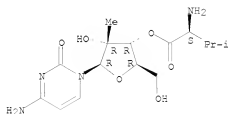
CM 1

McIntosh

10/609,298

CRN 640281-90-9
CMF C15 H24 N4 O6

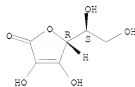
Absolute stereochemistry. Rotation (+).



CM 2

CRN 50-81-7
CMF C6 H8 O6

Absolute stereochemistry.

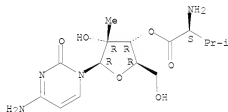


RN 642075-59-0 CAPLUS
CN L-Valine, 3'-ester with 2'-C-methylcytidine, 2-oxopentanedioate (salt)
(9CI) (CA INDEX NAME)

CM 1

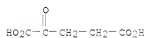
CRN 640281-90-9
CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).



CM 2

CRN 328-50-7
CMF C5 H6 O5



RN 642075-60-3 CAPLUS
CN L-Valine, 3'-ester with 2'-C-methylcytidine, 2,3-dihydroxypropyl phosphate
(salt) (9CI) (CA INDEX NAME)

McIntosh

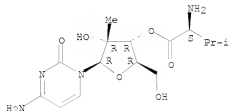
10/609,298

CM 1

CRN 640281-90-9

CMF C15 H24 N4 O6

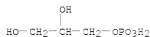
Absolute stereochemistry. Rotation (+).



CM 2

CRN 57-03-4

CMF C3 H9 O6 P



RN 642075-61-4 CAPLUS

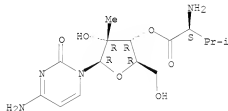
CN L-Valine, 3'-ester with 2'-C-methylcytidine, formate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 640281-90-9

CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).



CM 2

CRN 64-18-6

CMF C H2 O2

O=CH-OH

RN 642075-62-5 CAPLUS

CN L-Valine, 3'-ester with 2'-C-methylcytidine, (2E)-2-butenedioate (salt) (9CI) (CA INDEX NAME)

CM 1

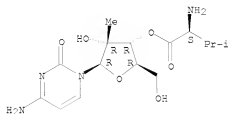
CRN 640281-90-9

CMF C15 H24 N4 O6

McIntosh

10/609,298

Absolute stereochemistry. Rotation (+).



CM 2

CRN 110-17-8

CMF C4 H4 O4

Double bond geometry as shown.



RN 642075-63-6 CAPLUS

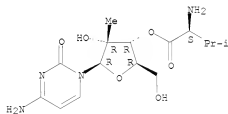
CN L-Valine, 3'-ester with 2'-C-methylcytidine, propanoate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 640281-90-9

CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).



CM 2

CRN 79-09-4

CMF C3 H6 O2



RN 642075-64-7 CAPLUS

CN L-Valine, 3'-ester with 2'-C-methylcytidine, hydroxyacetate (salt) (9CI) (CA INDEX NAME)

CM 1

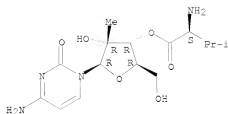
CRN 640281-90-9

CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).

McIntosh

10/609,298



CM 2

CRN 79-14-1

CMF C2 H4 O3



RN 642075-65-8 CAPLUS

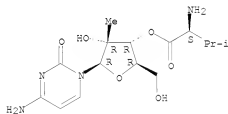
CN L-Valine, 3'-ester with 2'-C-methylcytidine, 2-hydroxypropanoate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 640281-90-9

CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).



CM 2

CRN 50-21-5

CMF C3 H6 O3



RN 642075-66-9 CAPLUS

CN L-Valine, 3'-ester with 2'-C-methylcytidine, 2-oxopropanoate (salt) (9CI) (CA INDEX NAME)

CM 1

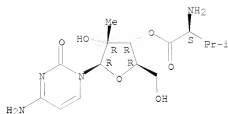
CRN 640281-90-9

CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).

McIntosh

10/609,298



CM 2

CRN 127-17-3

CMF C3 H4 O3



RN 642075-67-0 CAPLUS

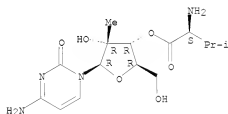
CN L-Valine, 3'-ester with 2'-C-methylcytidine, ethanedioate (salt) (9CI)
(CA INDEX NAME)

CM 1

CRN 640281-90-9

CMF C13 H24 N4 O6

Absolute stereochemistry. Rotation (+).



CM 2

CRN 144-62-7

CMF C2 H2 O4



RN 642075-68-1 CAPLUS

CN L-Valine, 3'-ester with 2'-C-methylcytidine, (2Z)-2-butenedioate (salt)
(9CI) (CA INDEX NAME)

CM 1

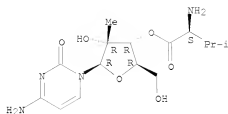
CRN 640281-90-9

CMF C13 H24 N4 O6

Absolute stereochemistry. Rotation (+).

McIntosh

10/609,298



CM 2

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



RN 642075-69-2 CAPLUS

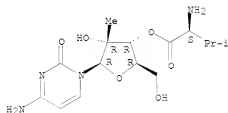
CN L-Valine, 3'-ester with 2'-C-methylcytidine, 2-hydroxybenzoate (salt)
(9CI) (CA INDEX NAME)

CM 1

CRN 640281-90-9

CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).



CM 2

CRN 69-72-7

CMF C7 H6 O3



RN 642075-70-5 CAPLUS

CN L-Valine, 3'-ester with 2'-C-methylcytidine, sulfate (salt) (9CI) (CA
INDEX NAME)

CM 1

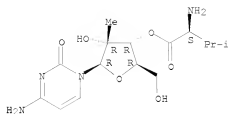
CRN 640281-90-9

CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).

McIntosh

10/609,298



CM 2

CRN 7664-93-9

CMF H2 O4 S



RN 642075-71-6 CAPLUS

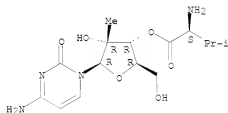
CN L-Valine, 3'-ester with 2'-C-methylcytidine, nitrate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 640281-90-9

CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).



CM 2

CRN 7697-37-2

CMF H N O3



RN 642075-72-7 CAPLUS

CN L-Valine, 3'-ester with 2'-C-methylcytidine, carbonate (salt) (9CI) (CA INDEX NAME)

CM 1

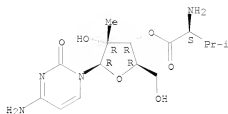
CRN 640281-90-9

CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).

McIntosh

10/609,298



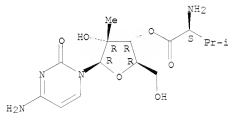
CM 2

CRN 463-79-6
CMF C H2 O3



RN 642075-74-9 CAPLUS
CN L-Valine, 3'-ester with 2'-C-methylcytidine, hydrobromide (9CI) (CA INDEX NAME)

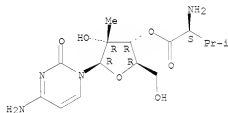
Absolute stereochemistry. Rotation (+).



●x HBr

RN 642075-75-0 CAPLUS
CN L-Valine, 3'-ester with 2'-C-methylcytidine, hydriodide (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



●x HI

RN 642075-76-1 CAPLUS
CN L-Valine, 3'-ester with 2'-C-methylcytidine, carbonate (2:1) (salt) (9CI) (CA INDEX NAME)

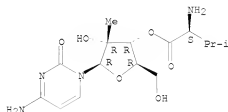
CM 1

McIntosh

10/609,298

CRN 640281-90-9
CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).



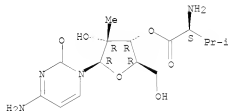
CM 2
CRN 463-79-6
CMF C H2 O3



RN 642075-77-2 CAPLUS
CN 1-Valine, 3'-ester with 2'-C-methylcytidine, phosphate (salt) (9CI) (CA INDEX NAME)

CM 1
CRN 640281-90-9
CMF C15 H24 N4 O6

Absolute stereochemistry. Rotation (+).



CM 2
CRN 7664-39-2
CMF H3 O4 P

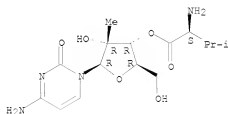


IT 640281-90-9P
RI: DNA (Drug mechanism of action); PAC (Pharmacological activity); PKT (Pharmacokinetics); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(ribofuranosylcytidine methylvaline ester for treatment of flaviviridae infections)

McIntosh

RN 640281-90-9 CAPLUS
 CN L-Valine, 3'-ester with 2'-C-methylcytidine (CA INDEX NAME)

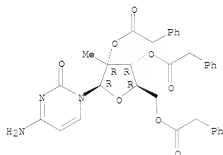
Absolute stereochemistry. Rotation (+).



IT 642075-41-0
 RL: RCT (Reactant); RACI (Reactant or reagent)
 (ribofuranosylcytidine methylvaline ester for treatment of
 flaviviridae infections)

RN 642075-41-0 CAPLUS
 CN Cytidine, 2'-C-methyl-, 2',3',5'-tris(benzeneacetate) (9CI) (CA INDEX NAME)

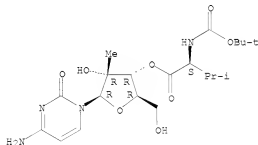
Absolute stereochemistry.



IT 640725-70-8P 642075-44-3P 642075-48-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACI
 (Reactant or reagent)
 (ribofuranosylcytidine methylvaline ester for treatment of
 flaviviridae infections)

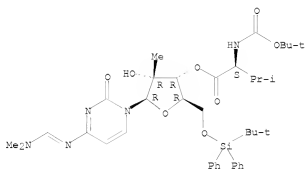
RN 640725-70-8 CAPLUS
 CN L-Valine, N-[(1,1-dimethylethoxy)carbonyl]-, 3'-ester with
 2'-C-methylcytidine (CA INDEX NAME)

Absolute stereochemistry.



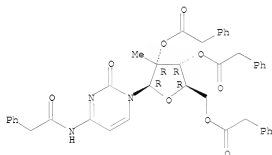
RN 642075-44-3 CAPLUS
 CN L-Valine, N-[(1,1-dimethylethoxy)carbonyl]-, 3'-ester with
 5'-O-[(1,1-dimethylethyl)diphenylsilyl]-N-[(dimethylamino)methylene]-2'-C-
 methylcytidine (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



RN 640725-48-7 CAPLUS
CN Cytidine, 2'-C-methyl-N-(phenylacetyl)-, 2',3',5'-tris(benzeneacetate)
(9CI) (CA INDEX NAME)

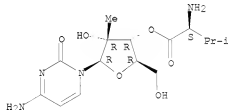
Absolute stereochemistry.



IT 640725-71-9P
RI: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(ribofuranosylcytidine methylvaline ester for treatment of
flaviviridae infections)

RN 640725-71-9 CAPLUS
CN L-Valine, 3'-ester with 2'-C-methylcytidine, hydrochloride (1:2) (CA
INDEX NAME)

Absolute stereochemistry. Rotation (+).



● 2 HCl

=> d his

McIntosh

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(FILE 'HOME' ENTERED AT 18:07:49 ON 08 JUN 2008)

FILE 'REGISTRY' ENTERED AT 18:07:59 ON 08 JUN 2008
L1      STRUCTURE UPLOADED
L2      24 S L1
L3      519 S L1 FULL

FILE 'CAPLUS' ENTERED AT 18:08:46 ON 08 JUN 2008
L4      120 S L3
L5      22496 S L4 AND FLAVIVIRUS OR PESTIVIRUS OR FLAVIVIRIDAE OR HCV OR HEP
L6      38 S L4 AND (FLAVIVIRUS OR PESTIVIRUS OR FLAVIVIRIDAE OR HCV OR HE

FILE 'REGISTRY' ENTERED AT 18:13:47 ON 08 JUN 2008
L7      STRUCTURE UPLOADED
L8      4 S L7
L9      171 S L7 FULL

FILE 'CAPLUS' ENTERED AT 18:14:23 ON 08 JUN 2008
L10     74 S L9
L11     37 S L10 AND (FLAVIVIRUS OR PESTIVIRUS OR FLAVIVIRIDAE OR HCV OR H

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